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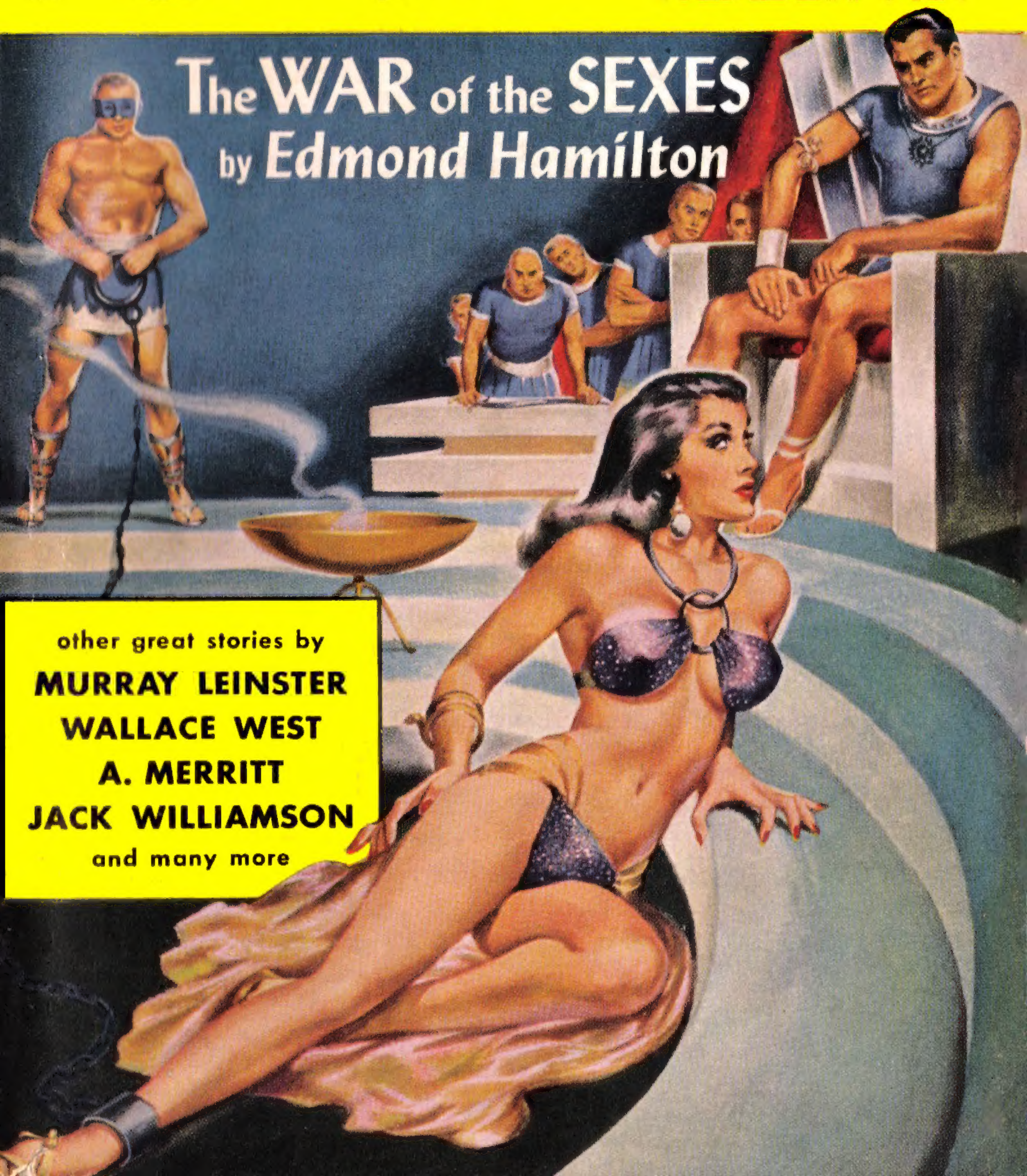
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READER NO. 1

The WAR of the SEXES by Edmond Hamilton



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* —D. A. W.

**AVON
SCIENCE-FICTION
READER**

No. 1

Edited By
DONALD A. WOLLHEIM

Stories By

MURRAY LEINSTER	EDMOND HAMILTON
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New York

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The War of the Sexes

by Edmond Hamilton

Many a person has spoken in jest of the war between the sexes. Thurber has produced some of his funniest cartoons on that subject: the inability of the male to comprehend the female and vice versa. Nobody can fail to notice the means by which each sex plots to ensnare the other; an intrigue which extends throughout every medium—dress, drama, conduct, arts, etc. There have been cultures in various places—semi-primitives in isolated lands still testify—where there exists an actual hostility between the sexes, where for instance women maintain secret codes and languages, live separately from the community of men. To this day, modern American males maintain lodges from whose portals women are barred and whose affairs are conducted with codes and ceremonies no woman may hope to learn. There is therefore nothing at all impossible about Edmond Hamilton's startling story of a period twenty thousand years from now. Nothing impossible, we repeat, but we certainly hope that it will always remain at least improbable.

IS THIS the residence of Doctor Daniel Lantin?" asked Allan Rand of the tall, bearded man with penetrating eyes who had answered his ring. "I am Doctor Lantin," the other told him. "You wish to see me?"

"About your advertisement," Allan said. "My name's Allan Rand—your ad asked for a young man without connections in search of exciting work, and I thought I might fill the bill."

"Please come inside," Doctor Lantin invited. "My laboratory is in the back of the house—this way."

Allan Rand, inside, went with the other down a narrow hall that opened into a square, white-tiled room. It was windowless, but a great lamp glowed at the center of the ceiling. There was a desk in the corner and on it a photograph that caught Allan's eye—a picture of a vivid-faced young girl.

Under the ceiling-lamp stood a table and beside it were racks of shining instruments and complicated apparatus with rubber tubing that looked like anesthetic apparatus. Around the walls were shelves of chemicals and jars holding odd specimens of animal life.

"I am a research biologist," Doctor Lantin explained, "and I want a young man with cold-steel nerve and a strong body to accompany me on a scientific expedition I am making soon to the South American jungles."

"I don't know about the nerve," Allan Rand grinned, "but I think my body's strong enough."

"I can soon ascertain whether that is so," said Doctor Lantin. "Will you please stretch out on this table for examination?"

Allan Rand climbed onto the metal table and stretched out. Doctor Lantin bent over him and then came a metallic click, and another. Allan felt with the sound of the clicks that something had fastened shut on his wrists and ankles. He strove to sit up and found that he had been fettered to the table with metal clamps!

"What's the meaning of this?" he demanded indignantly. "You needn't fetter me to this table for an examination!"

"The examination was only a ruse, Mr. Rand," said Dr. Lantin coolly, "and the advertisement also."

"What is this, then—a hold-up?" asked Allan Rand.

"In a sense," smiled the doctor. "Only I am going to take from you, not your money, but your brain."

At Allan's blank look his smile deepened. "For a long time I have believed that a brain removed from a living body could be kept living indefinitely in the proper serum, just as a chicken-heart has been kept living in serum.

"Of course no one would volunteer willingly to have his brain removed for such an experiment. There was nothing for it but to use an unwilling subject, to lure some one here to be the subject. I inserted my advertisement, and it brought you to me."

A cold sweat broke upon Allan Rand's forehead at Doctor Lantin's words. The man spoke as dispassionately as of the vivisection of a rat.

"But that's murder!" Allan cried. "You can't do such a thing without it being found out!"

"Murder is quite justified when it is committed in the interest of science," Lantin told him coolly. "As to discovery, you have no connections to worry about you and will not be missed. I assure you I am quite capable of disposing of your body once I have the brain out of it."

With the words Doctor Lantin pulled toward him the rack of surgical instruments and the anesthetic-apparatus with its rubber tubing and cone. He then brought a container of thick, clear liquid. Allan Rand saw and strained at his fetters.

"You can't do this thing!" he cried, "Lantin, it's crazy—to try to keep my brain living in a jar of serum!"

Doctor Lantin had the rubber anesthetic-cone in his hand. "It may be I'll not succeed," he admitted, "but I think I will. In any case you'll never know, Rand, for even if your brain does live on in the serum it'll be unconscious.

"A whiff of this anesthetic now," he smiled, "and it will all be over for Allan Rand. Any last words before you go into the darkness?"

He was pressing the cone to Allan Rand's nostrils as he spoke and Allan felt the stupefying scent overcoming his consciousness. Darkness indeed was gathering swiftly around him but out of that darkness he struggled with a last defiance to answer Lantin's mocking question.

"Last words? My last words are to—go ahead and—be damned to—"

Complete darkness and unconsciousness encompassed Allan Rand.

He was aware of the return of consciousness, his first sensation a racking

pain in his head. He groaned, stirred, and then was aware that he was lying on a softer surface than that of the table on which he had lost consciousness. He heard a murmur of voices, and opened his eyes.

Two men were bending over him and for a moment Allan lay motionless looking up at them. The men were middle-aged, and both were clad in soft blue silk-like jackets and blue, close-fitting knee-length trousers. They wore belts with clasps of white metal, and in a sheath at each belt was a flat white metal rod. One of the men was a head taller and broader-shouldered than the other. Both had intelligent features.

Allan Rand stared wonderingly up at them, and then the smaller of the two men spoke. His words were in English, but an English that seemed distorted and strangely accented, so changed in fact that it was only with difficulty that he understood.

"He lives, Krann! The scientists have succeeded—he lives!" the man was exclaiming.

"Yes, he is living!" conceded the bigger man, Krann. "Never thought I to have seen it, Durul."

Allan Rand struggled to speak, and when he did so, he found that his voice sounded strange, unnatural. "What's all this about?" he asked weakly. "Where am I?"

Remembrance came to him suddenly, and swift anger. "Where's Doctor Lantin? I remember now—by heaven, Lantin's going to account to me for this!"

"You are angry with some one, lord?" asked Durul.

"Yes, with the bird who was going to remove my brain—who trapped me in this laboratory!" Allan Rand said. "When I find him I'll——"

He sat up as he said that, and then the words died on his lips in sheer amazement as he looked around. He was not in Doctor Lantin's laboratory. He was in a strange room such as he had never seen before.

Its walls were of blue as brilliant as though the room had been hollowed from a gigantic sapphire, the sunlight that streamed through windows in one wall reflected back and forth in shimmering azure lightnings. Just beneath the windows stood the padded metal table on which Allan sat.

He saw that besides Krann and Durul there were three others in the room, clad in blue silky jackets and trousers also. These three stood respectfully beside squat, complicated-looking apparatuses of metal and glass. There were also metal instruments like the surgical instruments of Doctor Lantin, and a square container of thick clear liquid. The three blue-garbed men beside these instruments returned Allan's stare respectfully.

Allan turned to the two men beside him, Krann and Durul, then with a sudden thought turned still further to look from the windows behind the table on which he sat. He looked, felt his mind reeling at what he saw. For outside there stretched in the sunlight not the buildings of the city in which Doctor Lantin's house had stood, but a different and unearthly-looking city.

A city of blue buildings! Cubical buildings they were, mostly, but their size differed, ranging from small cubes of two or three stories to huge ones

whose roofs were like glistening blue plains. This multitude of turquoise cubes extended to the horizon.

The streets between them, even, were blue, thronged with azure-garbed figures. Tapering white aircraft flashed to and fro above the city so swiftly that they were white streaks in the sunshine. Allan was aware as he looked forth that the building from whose window he stared was perhaps the largest in the city, an immense blue cube surrounded by a plaza on which a crowd was gathered.

Allan turned from the windows toward the two men beside him. "What's this place?" he asked dazedly. "And Lantin—where's Lantin?"

"You mean the man you saw last?" Durul asked. "He has been dead for twenty thousand years."

"What?" yelled Allan Rand. "What kind of joke is this? Or have I lost my sanity?"

"Lord, you are still sane," Durul reassured him. "But since the man you call Lantin made you unconscious, more than twenty thousand years have rolled across earth."

"Twenty thousand years—it's impossible!" Allan cried. "You can't tell me that I could have lived through all that time, that my body could have been preserved!"

"Your body was not preserved," Durul said, "but your brain was! Twenty thousand years ago your brain was taken from your body by a scientist, and placed in serum. In that serum your brain lived on long after the scientist himself was dead.

"Other scientists, though, cared for the serum containing your brain, generation after generation of them. In that way for two hundred centuries your brain has lived without consciousness in the serum. And now that it has been put back into a body and restored thus to consciousness, you seem to yourself to have just awaked."

"It can't be true!" Allan insisted, cold fear at his heart. "Why, even if my brain was preserved in that way, my body couldn't have been saved to put my brain back in!"

"I did not say that your brain had been put back into *your* body," Durul answered pointedly. "I said it had been put back into *a* body."

As the full import of his words struck Allan, he looked down at himself for the first time.

He saw that he was clad in blue trousers and jacket like those of the others. But his strong, hard legs—his massive torso—his long, steady fingers and superbly muscled arms and shoulders—these were not of the body that had been Allan Rand's!

He was handed a mirror, and as he stared into it, it almost dropped from his hands. The face that looked back at him from the mirror was no more Allan Rand's than the body—it was a high, aquiline, merciless face with ruthless black eyes and a straight mouth. This unfamiliar face was topped by close-cut dark hair.

Allan let the mirror fall. "Good God, whose body is this that you've put my brain into?" he exclaimed. "Who am I?"

Durul bowed as he answered. "Lord, you are Thur, ruler of the Males."

"Ruler of the Males?" Allan repeated. "What do you mean?"

"Lord, great changes have taken place on earth while your brain slept in the serum. In your day the two sexes, Males and Females, mingled. But for eight thousand years now they have been distinctly separate races, deadly enemies of each other."

"Do you mean to say that a war of sexes has been going on for eight thousand years?" Allan demanded.

Durul and Krann bowed affirmation.

"But how has the human race perpetuated itself, then?" Allan asked.

"I will explain," said Durul. "Until ten thousand years ago men and women lived as in your time, marrying and producing children cared for by their immediate parents. Then a woman biologist achieved ectogenesis, the production of children in the laboratory directly from the human gamete-cells or seed cells.

"By treating the gamete-cells with a secret reagent she had evolved, she could fertilize them artificially and produce tiny embryos which, in an artificial environment equivalent to the placental arrangement of the human mother's body, grew into normal children.

"This woman biologist found she could produce children of whichever sex she wished, by controlling the number of chromosomes in the gamete-cells used. She chose to produce only female children, and she and the women disciples she gathered around her engaged in the large-scale production of females.

"The females would soon have outnumbered the males and dominated them had not a man biologist discovered the secret of ectogenesis also. He and his male associates determined to restore the balance of numbers and began producing male children on a large scale.

"Swiftly rivalry grew between the two sexes as to which should be dominant in numbers. Antagonism grew so great that association between males and females fell off. Marriage and the concepts of marriage and love declined until they had entirely disappeared.

"The children of the world were produced entirely by ectogenesis. The female scientists controlled the laboratories in which female children were produced, and the male scientists those in which male children were produced. Each sex produced as many children as possible, still hoping to outnumber and dominate the other sex.

"Sex riots broke out in the cities, males fighting females in the streets. Finally the two sexes separated, becoming two separate races, Males and Females. The rest of earth was gradually deserted as the two races settled wholly in this continent. The Males took the cities in the north, of which this city is capital, while the Females took the cities in the south, several hundred miles from here.

"Soon came open war between Males and Females, the Males going south in their flyers and with their fire-rods raining death on the women's cities, and the Females retaliating. That war has gone on ever since. In war as in

peace, the Males have a single ruler, as do also the Females, and you, Thur, are that ruler."

"But I still don't see how it is that I'm Thur," Allan persisted. "Why did you put my brain in Thur's body?"

"For this reason," Durul said. "Thur has been our ruler for ten years and his strong rule alone has held up the Male morale against the constant attacks the Females have been lately making on us. But this morning in landing his flyer on the roof of this palace, Thur was killed, part of his skull being crushed in on his brain.

"Krann and I, who are Thur's chief councillors, knew that once the Males learned their strong ruler was dead they would lose all courage. We asked the scientists if in some way they could not revive Thur. They said that as only his brain was damaged, putting a new living brain in his skull at once would reactivate Thur's body.

"There was no time to take out the brain of one of us to put in Thur's skull—every second was precious if Thur's body was to be reactivated. But the scientists said they had in their collections a brain kept living in serum for generations as a scientific curiosity. That could be used, they said, and we agreed.

"So the brain living in the serum, your brain, was brought and rapidly installed in Thur's skull, nerve-connections made, the broken parts of the skull fused. Then, when a little time had passed, your brain woke to consciousness in Thur's body. And now, lord, you are Thur, ruler of the Males, and their mainstay against the attacks which Nara, the Female ruler, and her lieutenants, Breela and Dulan, have been making on us. You must help the Males withstand them as Thur has done."

Allan Rand—despite that he wore Thur's body he could think of himself only as Allan Rand—was stunned. "And I'm Thur! What a nest of troubles Lantin shot me into—a war of sexes, and me ruler of the Males!

"Tell me, Durul," he said. "Isn't there a chance of stopping this war, of making peace between the Males and Females?"

Durul shook his head, and so did the big Krann. "There is no chance," Krann affirmed. "The Females will not stop their attacks on us until they have wiped out all Males and only Females live on earth."

"And our aim," Durul added, "is the same, to vanquish and destroy the Females so that the future will see Males only in the world."

"And a fine world it would be in either case!" said Allan disgustedly. "All men or else all women—some world!"

"And now, lord Thur," said Durul, "will you not show yourself to the Male crowds outside? Rumors have been spreading all day that Thur is dead, and they need but to see you to be reassured."

Allan hesitated. "All right," he said. "Since I've got Thur's body I suppose I'll have to live up to some of his responsibilities."

With the help of Durul and Krann he slid from the padded table. He tried his legs experimentally. He could walk and move as easily as he had ever done with his own body, he found.

Suddenly Allan wondered what had become of his own body. Destroyed

by Doctor Lantin, twenty thousand years ago, he supposed. He felt a hysterical homesickness for that familiar body, a strangeness in inhabiting this of Thur's. But Thur's body now was his—he must make the best of it.

Durul informed him that it was Thur's custom to show himself to his people from a terrace on the palace roof, and Allan acquiesced. Durul and Krann walked with him out of the blue chamber into a turquoise walled corridor. Along it stood guards with flat metal fire rods, raising these in salute as Allan—or Thur—passed.

They went through the blue hallways until they reached a shining white stair that wound both upward and downward. They went up this and soon emerged onto the roof of the palace, so vast in extent that it seemed like a great glistening blue plain. Many of the white flyers were parked in regular rows on the roof.

There was a little terrace jutting out at one side of the roof, and Durul and Krann led Allan out onto this. He looked down there from a great height upon the huge crowds of blue-clad figures that jammed the plaza below. His people, the Males!

And they were all Males. There were youths and even small boys among them, but not one woman.

He appeared on the terrace, and a tremendous shout of joy went up from the Male crowds as they looked up and saw Allan—or Thur.

Their shout was dying, when abruptly it welled up again in a great cry that was different in tone, a crescendo of surprise and fear. The crowd below was not looking now at Allan but up beyond him, pointing excitedly.

Allan looked quickly up with Krann and Durul, and saw a swarm of white flyers diving headlong onto the Male city from high above.

"A Female raid!" yelled Krann. "They'll be turning their fire rods on us in a moment!"

"Back inside, lord Thur!" cried Durul, but Allan was held motionless by the weird sight.

From the Female flyers, as they swooped plummet like upon the city, came flashing fire-bursts that cut swaths of scorching death across the crowds of running Males below.

The Males were not running for shelter, though, but toward their own flyers. Already dozens of Male flyers were swarming up to meet the Female craft.

The whole city had become a scene of wild uproar. The Female flyers formed a great upright revolving circle, the individual craft shooting down to loose fire bursts and then zooming upward again as those behind them took their place. From roofs across the city the Males replied with fire bursts as their own flyers took to the air.

Krann was running toward one of the parked flyers on the roof. Allan sprang with him to the craft.

"No, go not, Thur!" cried Durul, clutching to halt him. "You, the ruler, must not risk yourself in this battle——"

"Hel, of a ruler I'd be if I was afraid to fight with the rest!" Allan flung at him. "I never dodged a scrap yet—let her go, Krann!"

He had crouched behind Krann on the flat deck of the tapering flyer. Krann grasped its control wheel, shoved a lever with his elbow, and as a mechanism under the flat deck began to hum, the flyer shot steeply upward from the roof.

Krann half turned to yell to Allan, "The stern fire-rods, lord Thur—the triggers loose the fire flashes!"

There were fire-rods mounted on swivels at prow and stern, and Allan grasped the stern ones, his fingers closing on the triggers Krann had indicated. "I've got them—go ahead!" he cried.

Krann headed the flyer straight toward the maelstrom-like center of the battle. The big Male kept one hand on the control-wheel and the other on the trigger of the prow fire-rod.

They rushed through the air, then were in the thick of the combat—Male and Female flyers darting, banking, diving all around them. Fire-flashes burned thick from flyer to flyer and craft of either side fell in flames as they were struck.

Allan could glimpse the Females as green-clad figures easily distinguishable thus from the blue-garbed Males. Fire flashes scorched close past him as Krann swerved the flyer sharply. Two Female flyers were diving on them from above.

Allan swung the stern fire-rods up toward the down rushing craft, his fingers tense on the triggers. For a split-second he saw clearly the faces of the Females on the diving craft—girl's faces, eyes steady as they worked their own fire rods.

Good Lord, he couldn't fire on girls! The thought held Allan's fingers motionless on the triggers and almost caused his death, for in a second the girls on the down-rushing Female flyers loosed their bursts together. Only another lightning swerve by Krann evaded them.

Quick as thought Krann circled back and worked his own fire rod at the two Female craft before they could regain height. Krann at least had no compunction in firing on the Females—Allan saw the two flyers reel down in flames, hit Krann drove up again into the thickest of the fight.

But now the combat was scattering. Allan saw that the Female flyers were withdrawing, massing together and heading southward. Their swift raid finished, they were retreating, outnumbered by the Male flyers that had risen to repel them.

One Female flyer flew above the mass of the rest as though directing the retreat. Krann drove headlong toward this. Instantly he was engaged in a single combat with it, the rest of the Female flyers continuing their flight pursued by the Males.

Krann dived, circled, climbed, in aerial combat with the Female flyer. Allan, clinging to the deck, saw that on the Female craft were two green-clad girls, one working the fire rods and the other piloting the flyer.

The fire bursts of the Female craft almost got home, but Krann evaded them, achieved the advantage in height. Instantly his prow fire-rod spat a burst at the enemy flyer. It struck the Female pilot, destroyed her, and the craft reeled pilotless down toward the city.

Krann dived after it. Allan saw the remaining Female on the falling flyer struggling to reach its controls.

She had just done so, was levelling out the flyer in its downward plunge, when it crashed slantingly along the city's street.

Krann landed close beside it. The Female on the wrecked flyer leapt from it, a small hand fire-rod in her grasp.

But Krann and Allan were too quick for her. They seized her before she could use the weapon. She struggled, and Allan was amazed at the wildcat strength in this girl's lithe, slender body.

But Males in the streets were running to the scene, helped to hold the Female, Allan, panting, stepped back. He saw now that the girl wore jacket and short tunic of green.

Her black hair was close-trimmed and uncovered. Her dark eyes were flaming with wrath and her breast rising and falling as she stood in the grasp of her Male captors.

Through the gathering crowds of Males pushed a group of guards and with them came Durul, his anxious face seeking Allan.

"Lord Thur, you're not hurt?" he cried.

"No, thanks to Krann," Allan said. "And Krann and I seem to have taken a captive."

Durul turned his gaze on the girl. His eyes widened as he looked at her. "Do you know who this Female is?" he cried.

Allan and Krann shook their heads. "It's Nara, ruler of the Females!" Durul cried. "You've captured the Female ruler!"

"Nara!" shouted Krann. A fierce shout went up from the Males around. "Nara captured!"

The girl spoke, her eyes deadly in their hate. "Yes, Nara, you dogs of Males! And sorry I am that I could not kill more of you before this happened to me."

"You'll have the guards kill her at once, Thur?" Durul asked.

"Kill her?" Allan repeated.

"Of course—we Males kill all Females we capture and so do they any of us they take prisoner. I will give the order to the guards."

Durul turned to do so but Allan's voice halted him. "Don't do it! You can't kill this girl like that!"

Durul and Krann stared at him in sheer astonishment. "Why not? She is a Female—a deadly enemy of all our race."

"Yes, and will be while I live!" exclaimed Nara. "I ask for no mercy from you, Thur."

Shouts went up from the Males around. "Death to Nara! Kill the Female!"

Allan asserted himself. "I am Thur, am I not?" he said coldly to Durul and Krann and the gathered Males. "It is my order that instead of killing this Female you imprison her securely."

For a moment Allan thought that Durul and Krann would rebel at the order. But they did not.

"You are the lord Thur," said Durul bowing. "The order will be obeyed."

He gave a brief order to the Male guards, who led Nara, a slim, defiant figure, toward the great palace of Thur in which Allan had awakened.

Allan looked up and saw that the sky over the city was now full of Male flyers returning from their pursuit of the Female flyers. The Male city was alive with excitement.

"The Females got away?" Allan asked, and Durul nodded.

"Most of them did, but many of them we destroyed. And they lost their ruler—this has been a disastrous raid for the Females."

With Krann and Durul, Allan walked back into the palace of Thur. As they entered it a guard reported to Allan.

"We have placed Nara in one of the cells in the lowest level of the palace, under guard, lord Thur," he informed.

"All right, keep her there for the present," Allan said. "I'll decide what's to be done with her."

But by the time night came Allan had made no progress toward a decision. He sat with Krann and Durul at a little table set upon the terrace that jutted from the palace's roof. He had eaten with the two Males a supper of synthetic foods of jelly-like consistency, strange but not unpleasant to the taste.

Now he sat looking out. Night lay over the Male city, whose buildings were outlined by the lights that blinked here and there in an irregular pattern. Swift humming shapes came and went in the darkness overhead, patrols of Male flyers on the alert against another Female attack.

"But it will be some time before the Females raid again," said Durul with satisfaction. "Yes, down in the Female cities, Breela and Dulan and the rest of the Females will be sad tonight thinking of their ruler Nara's capture."

"And will be sadder when they hear that we've killed Nara," added Krann, with a sidelong glance at Allan.

"Why are you so set on killing this Nara?" Allan asked. "Why do all you Males feel that you have to destroy every Female?"

"Lord Thur, had your best friends been killed by Females you'd have as much hate for them as we do," said Durul solemnly.

"And the Females feel the same way about the Males," Allan commented. "And just because this damned sex war started it'll be fought until one or the other of the sexes is wiped out."

"That is what we Males are fighting for—to rid the world of the Females!" said Durul fervently. "And to kill Nara will be a step in that direction—she has been one of the ablest Female rulers."

"There is in fact nothing you can do but kill her, lord Thur," Krann pointed out. "You can not keep her prisoner forever and you cannot let her go back to the Females to make new raids on us."

"Well, I'll decide what's to be done with her," Allan said. "I wish I had the man who shot me ahead into this world, into another man's body and responsibilities and into this crazy war of sexes."

When Durul and Krann had gone from the terrace, Allan sat on, looking out over the night-shrouded Male city and brooding further on the strange situation into which Lantin's mad experiment had projected him. What a

world it was into which he had awakened so strangely! A topsy-turvy world, a loveless world in which the sexes had become the bitterest of enemies.

Allan remembered how back in his own time, even, there had been signs of this. The emergence of women from the age-old subjection to the other sex had stirred up no small amount of sex-jealousy. Rivalry of men and women had grown in many cases to antagonism and open enmity. And now that the mating of men and women was no longer necessary for the perpetuation of the race, the two sexes had come to open war and fought, each to wipe out the other.

And if one sex won, destroying the other completely, what would the world be then? A world in which only men or only women existed, a sexless world as devoid of color and warmth as that of some insects. A world in which all the violent emotional contrasts and upsets that had formerly enlivened the earth were done away with, a cold, gray, loveless and sexless world!

Allan stood up suddenly. That vision appalled him—yet what could he do? What must he do? His thoughts swung to the girl captured that day, this Nara who was the Female ruler as he, Thur, was ruler of the Males. Could he, he wondered, get Nara to help him end this senseless war of men and women? Remembering the girl's fierceness, he doubted it. But it was worth trying.

He strode to the stair and passed down it to the lowest level of the palace, guards stationed on the softly lit landings saluting him with their fire rods as he passed. There he saw a corridor stretching away, dimly lit, with barred doors along its walls. Two guards stood in it. They saluted as Allan approached.

"In which cell is the Female, Nara, prisoned?" Allan asked.

One of the guards pointed to a door. "In that one, lord Thur."

"You have the key to it?" Allan asked. "Give it to me—I will speak with Nara."

"Shall we attend you, lord Thur?" the guard asked as he handed the key. "The Female is fierce, and we can go with you."

"To protect me from a girl?" Allan smiled. "No, I can take care of my self. Remain here."

He went down the corridor to the metal barred door the guard had indicated, and stopped outside it, looking into the softly lit cell.

Nara sat on a metal bunk, her slim, green-clad figure gallantly erect as she gazed out the cell's tiny single window.

As Allan inserted his key and entered the cell, Nara turned quickly. She recognized him and at once her eyes blazed defiance, her lithe body tense as that of some wrathful young tigress.

"Well, lord Thur, was capturing me not enough?" she asked bitterly. "Must you come to gloat over me too?"

"I'm not here to gloat," Allan Rand told her. "I'm sorry for you, Nara."

"Sorry for me?" Nara hissed the words in fury. "I know how sorry you are, you Male dog! You have done more than any other Male to wipe out the Females!"

"That's what I came to talk about," Allan said. "You see, I wouldn't want to see the Males wipe out the Females at all."

"You wouldn't——" Nara looked at him incredulously. "Do you expect me to believe that?"

"Why not?" said Allan. "I think it would be rather a dippy world with nothing but men in it, don't you? Or nothing but women?"

"You can not deceive me, Thur!" the girl exclaimed. "I know that for years you have been the worst enemy of the Females."

Allan pondered. "Suppose I told you that I wasn't really Thur at all?" he asked. "That I was really another man—a man from the far past—in Thur's body?"

"A man from the far past in Thur's body?" Nara's brow wrinkled. "I do not understand—but I do know that you are Thur."

"Well, let it pass," Allan said. "But even admitting that I'm Thur, you can put it that I've had a change of mind, that I don't want any more to exterminate the Females."

"But why not?" The girl's anger was lost for the moment in sheer puzzlement. "Why shouldn't you want to kill all the Females?"

Allan laughed, his first whole-hearted laugh since his strange awakening. "Well, we men did sometimes feel back in my own time that we'd like to kill all the women. But more often we felt like kissing them."

"Kissing them?" Nara repeated. "You speak in riddles, Thur. What do you mean by kissing them—torturing them?"

"It wasn't exactly torture," Allan grinned. "It seems that kissing's been forgotten in all these sex wars, and no wonder. Wait, I'll show you what I mean——"

His arms went around Nara's slim shoulders and drew her to him. For the moment Nara was too taken with surprize to struggle. Allan kissed her, her lips soft and fragrant against his own, her eyes staring amazed into his.

Then suddenly she was struggling fiercely, quickly, with surprising strength. She flung Allan from her and backed against the cell wall, staring at him half in astonishment and half in wrath.

"Not bad, considering it's the first kiss the world has seen for eight thousand years," said Allan.

"And Males and Females did—that—back in the past?" Nara said unbelievably.

"They sure did," Allan said. "And they weren't Males and Females then—but men and women who loved each other."

Nara's face was scornful. "The histories tell of that—the savage times when Females degraded themselves by loving Males."

"What was savage about them?" Allan demanded. "I'd like to see things like that again, instead of this crazy war of sexes you've fought so long."

"You'd like to see Males and Females make peace?" said Nara. "Yet you fought the Females today—took me captive——"

"I did no fighting really today," Allan Rand said, "nor did I mean to make a captive of you. As it was, I kept them from killing you."

"What good was that?" Nara asked. "Better a quick death than a lingering one here in this cell."

"But you're not going to stay here!" Allan exclaimed. "I'm going to let you go, if you'll help me in my efforts to make peace between the Males and Females."

"Let me go?" Nara said amazedly. "Even you, Thur, could not do that. Darul and the Males would never permit it."

"They won't know anything about it until it's done," Allan told her. "But if I do free you, Nara, will you help me to stop this war?"

Nara considered. "Certainly the war between Males and Females has gone on long," she said. "Though the Males started it——"

"No matter who started it, the thing to do now is to end it," Allan declared. "Will you help me do that?"

Nara hesitated, then suddenly nodded. "Yes, I will help you, Thur—will do all in my power to have the Females make peace."

"Good girl!" Allan's hand closed impulsively on hers. He stood up. "If I get you up to the roof you can get away on one of the flyers."

Nara nodded quickly. "I can avoid the Male patrols in the darkness without difficulty," she said.

"Then I'll get these two guards out of here and then we'll try it," Allan said. "Wait here."

He went out of the cell into the corridor and approached the two guards, who came to attention.

"You can return to your quarters," he told them. "There's no need for further watch here."

The guards looked surprised but saluted obediently. "The order will be obeyed, lord Thur," they said, and departed.

Allan waited until they were gone and then went back into the corridor. "All clear," he told Nara. "I think we can get to the roof without being seen."

They moved to the door and then he halted her, his hand on her arm.

"Are you sure, Nara, that I made quite clear to you what kissing was, a little while ago?" Allan asked.

Nara nodded puzzledly. "Your demonstration was quite clear, Thur."

"Nevertheless," Allan said unsmilingly, "I think I'd better demonstrate it again. I wouldn't want you going away with any hazy ideas on the subject——"

He drew her slim form close to him again for a moment, his lips again seeking hers, arms about the soft shoulders.

This time Nara did not struggle. It seemed to Allan, indeed, that she kissed him back, and she was white and a little trembling when he released her.

"We'd better get started, or I'll be keeping you here after all," said Allan a little unsteadily. "Come on, Nara."

They went out into the corridor. "If we meet some of your people, Thur, what then?" Nara asked.

Allan shook his head. "They'd probably stop us, for all that I'm their

ruler, they hate you Females so. But we'll cross that bridge when we reach it and here's hoping we don't reach it."

They came to the winding white stair that led upward through the palace's levels to the roof. Quickly they climbed, Nara moving as rapidly as Allan could. They passed the landing at the first level, then that at the second, unobserved.

Up through level after level they followed the stair. At the sixth or seventh they stopped suddenly. They glimpsed Males on the landing above.

They waited, Allan searching his brain for an expedient to pass the Males unobserved. He could guess that if he were found helping the Female ruler, Nara, to escape, not even the fact that he was Thur would excuse it. And it might well be that Durul and Krann then would tell the Males that he was *not* really Thur.

But as he paused with Nara in indecision the necessity of an expedient disappeared, the Males on the landing above vanishing as they moved off along the halls of that level. Allan breathed more easily, waited a few moments, and then with Nara's hand in his climbed rapidly up past that landing and past others until they emerged onto the roof.

In the darkness of night the roof was a dimly seen flat expanse on which the white shapes of the parked flyers glimmered. Overhead, buzzing craft came and went, Male patrols keeping watch in the darkness for possible Female attackers. The great city of the Males stretched in the distance, a plain of blinking lights.

Allan and Nara moved toward the nearest of the flyers. Nara clambered onto it, hastily examined its controls, then touched some of them and brought from the flyer's mechanism a deep hum.

As she crouched at the flyer's controls, Allan, standing on the roof beside her, leaned toward her.

"You can get past the Male patrols all right, Nara?" he asked, and she nodded.

"It will not be hard, for it will not be the first time that I've slipped between them."

"Then good luck, Nara, and remember that when you get back to the Female cities you must make every effort to get them to agree to peace. I will be doing the same with the Males here."

"I will do it, Thur," she promised. "And will—but look behind you!"

Allan whirled, expecting to see Male guards emerging onto the roof. But no one was there.

He turned quickly back to Nara. In the split second that he turned he saw Nara's arm raised above his head, one of the flyer's metal control-handles in her grasp. Then the blow descended on Allan's head, his brain seemed to explode in flame, and his senses forsook him.

Only slowly did Allan regain his senses. His first sensation was of a loud droning in his ears, and then he was aware that air was beating on his face. He tried to move and found he could not.

He opened his eyes and looked dazedly around. He was lying on the deck of one of the flyers, bound tightly to one of the stern fire rods.

The flyer was moving at high speed through hot sunlight. The sun, indeed, was several hours high and disclosed that the craft was flying over a great grassy plain. A girl's slim figure crouched at the controls in the flyer's prow—it was Nara!

Allan remembered now—his setting Nara free, going with her to the palace roof, and then her exclamation, her blow with the control handle. She had knocked him unconscious, then, and bound him to this gun!

Nara turned, and as she saw that Allan was awake a mocking smile crossed her face.

"Well, lord Thur, awake at last?" she said. "You slept long enough."

"Nara!" muttered Allan. "What does all this mean? You struck me down—bound me——"

Nara laughed, silvery and triumphant laughter. "I did, and I did more than that!" she exclaimed. "I got away in the darkness from the Male city with you, Thur, ruler of the Males, my prisoner!"

"The sorrow of the Females for me, their captured ruler, will be changed to rejoicing soon. For not only did I do what no other Female has done, escape the Males when once captured by them, but I also bring the Male ruler with me as *my* captive!"

"Your captive?" Allan's dazed brain could not comprehend. "But you were going to have the Females make peace with the Males—you said so when I let you go——"

"And you believed me!" Nara mocked. "Surely, lord Thur, you have lost the craft that was yours in years past, when you could believe such an incredible thing as that I would make peace with the Males. No, Thur, you might have known that no matter what I said, neither I nor any Female could ever really want peace with those who have been for ages the most bitter enemies of our race."

"But I thought somehow you were different," Allan said, "that you could not hate the Males so. When I kissed you there——"

"When you did what you called kissing," said Nara contemptuously, "I suffered the indignity only because by so doing I was getting you to set me free."

"And you fooled me completely!" That fact beat strongest in Allan's mind. "Fooled me—well, I'll say that women haven't changed much after all in twenty thousand years. They can lie and deceive as well as ever. But what are you going to do with me when you do get me to the Female cities?" he asked. "I take it that I'm not going there just for the ride."

"You will be executed there, of course," said Nara. "Did you think the Females would let Thur, who has long been their worst enemy, continue to live?"

"I didn't and I don't want them to," said Allan bitterly. "I've had more than enough of this crazy damned world and I don't care about living any longer in it."

He sank back, his head throbbing with pain. Nara, at the controls, held the craft's flight steadily onward, southward.

Allan's thoughts were chaotic. Outwitted, fooled, as completely as any

man back in his own time had ever been by some smooth tongued woman! The girl there at the prow had done it as well as though trained for it by a lifetime of association with men. All her female instincts of deception and betrayal had risen to help her, Allan thought.

He could see what a triumph it meant to her, not only to have fooled Thur, the great ruler of the Males, into letting her escape, but bringing Thur with her as a helpless prisoner. Allan could guess what the real Thur, the Thur whose body he was wearing, would think of such a happening, of how he would have raged.

What difference did it make? he asked himself dully. He was better out of such a world, indeed, as this that Doctor Lantin had projected him into. It had repelled him in his first contact with it, this world where between men and women was nothing but rancorous race hostility, this loveless world with its mechanical production of children.

He had thought for a brief time that he had discovered something warm and human in it in his contact with Nara, her willingness to help him bring peace to Male and Female, her kisses—but he had awakened now to find Nara too a part of that fierce and loveless world, her softness only sham. Better for Allan Rand out of such a world, indeed!

He closed his eyes. When he opened them again Nara was still guiding the flyer steadily southward.

The grassy plain still extended in all directions without a break. There were no signs of human presence on it. Allan guessed that this was an uninhabited no-man's-land between the northern cities of the Males and the southern Female cities.

For hours they flew on over these uninhabited spaces, the sun swinging across the zenith and bringing an afternoon heat of increasing fierceness. There was no conversation between them, though Nara came back to the flyer's stern at intervals and inspected Allan's bonds. She was taking no chances of his turning the tables, he thought grimly.

He watched the girl from where he lay. Her slim, clean-lined body crouched at the controls, her keen, eager face beneath the dark hair—certainly there was something fine in her appearance, Allan admitted to himself. But he knew how deceptive this appearance was—all this eagerness of hers was to get him to the Female cities where, as she hated Thur, his shrift would be short.

They flew on, and after a time Nara turned to look back at Allan. "Tired of your bonds, lord Thur?" she said. "We will reach the chief city of my people soon."

"Where I'll be free of bonds and life both in short order," Allan said dryly.

Nara looked at him soberly, her mocking triumph of before no longer on her face. "Well, why not? Why should we Females be merciful to the great enemy our race has had among the Males?"

Allan made no answer. Nara looked ahead again, but in a second turned back to him.

"Flyers ahead! They are Female patrols—we are near my city."

Dots in the sky far ahead were all that Allan could see, but these rushed

rapidly closer and as they did so grew into white flyers moving in an extended line.

These darted toward their own craft, circled and flew level with it. Nara stood up, making signals, and Allan heard exclamations of joy from the Females on the patrol flyers as they discerned their ruler.

The patrol ships grouped around the craft of Nara and Allan and sped on southward with it. Allan watched.

Soon he made out the outline of buildings at the skyline ahead. Tall, rectangular structures they were, a far flung city much the same in outline as the city of the Males he had seen. But as he drew closer he saw that the buildings were not blue like the Male ones, but green.

Green was apparently as distinctively the Female color as blue the Male. The buildings might have been huge blocks of jade, the streets like rivers of molten emerald. All those Females whom he could see in the streets were clad in green like Nara.

Midway in the city rose a group of tall block like buildings. Over these buzzed and hummed many flyers, part of the network of patrols that extended over the Female city in every direction. Toward these buildings the flyer of Nara and Allan, and its escort, sped, two of the patrol-flyers going ahead.

By the time the craft of Allan and Nara dipped down to land on the roof of the biggest building, the patrols that had gone ahead had brought a crowd of excited Females out onto the roof. In the midst of this crowd they landed. Nara stepped off the flyer, into the midst of the excited, gesticulating girls and women.

They grasped her arms, shouting in joy, for the moment not noticing Allan's bound form. Two tall women came through the crowd to Nara, and from their air of authority Allan guessed them to be the lieutenants of Nara whom Durul had mentioned, Breela and Dulan.

"Nara, you escaped then from the Males!" cried one of them.

"I did, Breela," said Nara. "And I brought one of the Males back with me."

She pointed to Allan. Breela and Dulan and the other Females on the roof stared at him a moment. Then a fierce roar went up.

"Thur!" cried Breela. "Thur himself—and you brought him back! The bitterest Male enemy we have ever had, in our power!"

"Kill him!" cried one of the Females wildly. "Death to Thur!"

"Yes, death to Thur it shall be!" Breela cried. "You'll have him executed at once, Nara?"

Nara looked at Allan. Allan smiled as he met her eyes, and she turned her gaze from him. "Not yet, Breela," she said. "Put him in one of the cells for the time being."

Breela's brows drew together, and from the Females on the roof came a mutter of dissatisfaction.

"Why not execute him now?" Dulan demanded.

"Because"—Nara hesitated a moment, then went on—"because all the Females in the city should be here to see when their great enemy is killed."

Breela's brow cleared. "It is well thought of, Nara!" she said. "That is a spectacle no Female will want to miss."

"Put him in one of the cells now," she ordered a group of girl guards. "See that there is no possible chance of his escaping."

The guards did not unbind Allan but lifted his helpless form and carried him. As he was borne off he saw Nara led away by Breela and Dulan and the other excited Females.

The girls bore Allan down a stairway and through halls much like those that had been in the palace in the Male city, save that here the dominant motif of green was everywhere present. He was thrust into a small cell, his bonds removed while fire-rods covered him, and then the girl guards retreated from the cell, locked its door, and took up their station outside.

Allan stretched his stiff, cramped limbs and rubbed his skin where the bonds had chafed it.

He looked about the cell and smiled mirthlessly. The situations were exactly reversed. It was he now who lay prisoner in Nara's palace.

Allan lay down, and despite the soreness of his muscles, soon slept heavily. He knew when he awoke that he had slumbered for some hours, and then saw that he had been awakened by the entry of some one into his cell.

It was Nara. She looked at him with an intentness of expression Allan could not fathom. The guards outside were now a little down the corridor, but Nara's fire rod was in her belt.

Allan smiled. "Well, we seem to have changed places. Your turn now to do a little first-class gloating, Nara."

"I do not wish to gloat over you, Thur," Nara said soberly, "for you did not over me."

"Too bad for me I didn't," said Allan bitterly. "I suppose they're making ready for the general festivities attendant on my execution?"

"They will soon be ready," Nara said. "But I am not going to have you killed, Thur. I am going to let you go."

"You're what?" said Allan, amazed.

"I'm going to let you escape," Nara repeated. "You let me go, when I was in your power. I was wrong to take you captive then as I did, but I will send these guards away and get you out of the city before they kill you."

"And just why are you doing so?" Allan asked.

She looked at him doubtfully, unsurely. "Because you let me go, as I said. I am grateful for that, and——"

"It's only gratitude you feel then?" Allan asked.

Nara's eyes now were even more unsure. "What else could I feel, Thur?"

Allan's arms for a third time grasped her, drew her unresistingly closer. "It couldn't be love you feel, Nara?"

Nara raised her eyes to his. "A Female could never love any Male, Thur," she whispered. "Yet——"

"Yet?" Allan prompted, his face close to hers.

"Yet I do love you!" she murmured. Their lips met—and then Allan flung Nara back against the cell's wall with all the bitterness that for hours had been growing in him.

"You do, do you?" he exclaimed. "Then you know now what it means to have some one you love deceive and betray you!"

Nara's face was dead white as she looked at him. Before she could speak, a woman's voice came from the door. "All is ready, Nara. Shall we take the prisoner up now?"

They turned. It was Breela who stood at the door, her face alight with exultation.

"Shall we take him up now?" Breela repeated. "All the city's Females are gathered around this building to see Thur die."

Nara nodded. "Yes, bring him now if all is ready."

She went out of the cell without meeting Allan's eyes. Breela called the guards, and these haled Allan from the cell, their fire rods constantly covering him. They marched him along the corridor, Nara and Breela going ahead.

Up the stair—Allan's thoughts were whirling—up past level after level until they emerged onto the roof.

Night had come while he slept in the cell, Allan saw, but the darkness over the Female city was dispelled on the roof by brilliant flares. The roof was packed with Females, and down in the wide streets around the building were tens of thousands more, all looking tensely upward.

As Allan looked around, he felt his heart beating faster despite himself. A queer way for him to end, a queer place—this world of twenty thousand years in the future into which Doctor Lantin had flung him. Allan wondered momentarily what Durul and Krann and the rest of the Males would think by now of the disappearance of their ruler.

He saw Nara standing silently, her face still white, with Dulan and Breela and others of the Females. Breela gave an order.

In answer to it girl guards marched Allan to the edge of the roof. He heard a tremendous roar from below as the Females in the streets glimpsed their hated enemy, Thur.

The girl guards moved back from him and he was left alone at the roof's edge. He saw the girls raise their fire-rods. Their faces were coldly exultant.

Allan turned his eyes toward Nara. She was looking steadily at him. Breela, beside her, leaned toward her. "It is for you to give the order to fire, Nara," she said.

"I am not going to give that order," said Nara clearly.

Breela frowned. "But one of us must if Thur is to die, and you as ruler——"

"Thur is not going to die," Nara said. "I have decided."

An amazing babble of murmurs went up from the Females on the roof. Unbelieving were the faces turned toward Nara. Breela was staring at her ruler.

"Take Thur back down to the cell," Nara said. "It is my order."

The guards moved to obey, but Breela's outflung hand stopped them.

"Have you become traitress to your race, Nara?" she cried.

"I am ruler," Nara returned, "and I say Thur dies not."

"And I say you are no longer ruler of the Females when you try to save the life of the Females' worst foe!" Breela cried.

She turned to the Females on the roof and those in the streets below.

"Say, Females!" she shouted. "Does the Male Thur die now?"

"Kill Thur and the traitress Nara now!" they yelled furiously. "Death to Thur and Nara!"

"It shall be so!" Breela cried. "Guards, you have heard—seize Nara and place her beside Thur!"

A half moment the guards hesitated, then sprang toward Nara and grasped her. Unresistingly she let them thrust her across the roof toward Allan.

As the girl guards went back across the roof, Allan caught Nara to him. She was sobbing.

"It is of no use, Thur," she said. "I tried to save you and could not."

"Nara, you've killed yourself trying to save me!" Allan cried. "You shouldn't have done it. I love you in spite of what I said a little while ago, and you shouldn't have done this."

"It does not matter," she said. "I would not want to live now with you dead, Thur. And this ends us together——"

Allan held her close, despairingly. The yells of the furious Females on roof and streets were now like a single hateful bellowing voice in their ears. Across the roof Breela gave an order, and the girl guards again raised their deadly weapons.

Another moment would see the end for both of them, Allan knew. But before the fire-streaks leapt from the rods, there was a sudden interruption. Down from the upper darkness of the night smote flash on flash of fire, striking across all the Female city!

"A Male attack!" yelled Dulan, pointing to the flyers diving from above as they loosed their fire flashes.

"It's Durul and Krann!" Allan exclaimed. "They found you'd taken me, Nara, and have come after me!"

"Into the flyers!" Breela was crying. "Quick, before the Males destroy us all!"

Already Females were leaping into the flyers parked on roofs and streets and soaring up into the darkness to meet the fierce Male attack. Swiftly combat was joining above the city, Male and Female flyers diving and circling in the darkness, those struck by fire flashes coming downward in bursts of flame.

Breela was running with other Females to the flyers, as were the guards who had been about to execute Allan and Nara. Allan saw that for the moment he and Nara were forgotten, and sudden hope flamed in him.

"Quick, Nara!" he cried. "If we can get away in a flyer now——"

They ran to one of the nearest ones, leapt onto it. Allan fumbled frantically at its controls, Nara's hands guiding him. The flyer hummed, started steeply upward into the air——

"Thur, look!" screamed Nara suddenly.

Allan glanced downward. On the roof they had just quitted Breela had

glimpsed their flight, had shouted a quick order to some of the Females. Their fire rods were already raised toward the flyer of Allan and Nara. The whole scene seemed frozen for a second.

In that second Allan knew that they could not evade the deadly fire flashes of those rods. He had just time to reach with his arm for Nara, to hold her tightly to him for an instant. Then as that instant passed, fire leapt from the rods below, fire seemed to flame destroyingly through Allan's whole universe, and then was succeeded by impenetrable blackness.

Blackness—blackness—could he be awakening from death, the death the fire rods had sent him and Nara? he asked himself. For he was waking, was conscious again of Nara's soft body held tightly in his arms as he had grasped it in that last instant. And then he heard Nara's voice.

"He's coming to, Dad! Look how he grasped me!"

Then a man's voice, chuckling, somehow familiar. "So I see! He can't be so unconscious when he does that."

Allan opened his eyes, then looked about him, bewildered. He was lying flat, still holding Nara tightly in his arm.

Nara it was, indeed, her clear eyes looking into his, her vivid face anxious, but a changed Nara—she wore now not the green jacket and tunic but a dress strange and yet familiar to Allan's eyes, the dress of a girl of his own time twenty thousand years before.

He looked from Nara to the other figure bending over him, the man. He was tall, bearded, his eyes penetrating but having now an amused twinkle in them. Where had he seen those eyes before, Allan Rand asked himself, this man—

"Lantin!" Allan cried suddenly. "By heaven, Doctor Lantin!"

"None other," Lantin conceded. "But take it easy for a little while, Rand."

"But how did you get here to this time——" Allan Rand began, and then his jaw dropped as his eyes took in the room in which he lay.

It was that same laboratory of Doctor Lantin's in which he had lost consciousness when Lantin had been about to remove his brain!

He was lying on the same table, the same instruments beside it, on the desk in the corner the same photograph of a girl he had noticed on entering the room. But he recognized the girl in the photograph now—it was the girl beside him, was Nara!

"I'm back, then!" Allan whispered. "Back in my own time!"

"Your own time?" the girl asked. "What do you mean?"

"From the time you sent me into, twenty thousand years in the future," Allan explained to Lantin. "I woke there, by brain preserved and transplanted into another body——"

Lantin laughed heartily. "Nonsense!" he said. "You've been lying on this table unconscious for an hour, and that's all. I never did anything with your brain, though my threat to remove it apparently has given you a wild dream in the meantime."

"But it couldn't have been all dream!" Allan Rand protested. "I met Nara here in it——"

"My name isn't Nara—it's Janet Lantin," the girl told him.

"My daughter," Lantin nodded. "You saw her picture on the desk when you came into this laboratory and that's why her image persisted in your dream."

"All a dream!" Allan said dazedly. "But why did you do all this—tell me you were going to take out my brain, and put me under anesthetic?"

"Well," said Lantin, "I told you the exact truth when I said I wanted an assistant for my South American expedition who had strength and a cold steel nerve. I could see you had the strength, and I used this stratagem to find out if you had the nerve."

"If you'd screamed or whined or wept there when you thought I was about to deal out a horrible fate to you, I wouldn't have blamed you but I'd have known you weren't my man. But instead, even when you were passing under the anesthetic, you were defiant enough to tell me where to go."

"I meant only to give you a touch of the anesthetic, of course, but the darned thing got out of control for a minute and you got a double portion. It was enough to keep you asleep since then, and I was working to revive you when Janet came in. She lined me out for using such a method to test my assistant, and then helped me. You came back to consciousness and clutched Janet with a death grasp."

Allan was suddenly aware that he still held the girl in that tight clasp. He dropped his arm quickly.

She smiled at him—Nara's smile—and his heart warmed. "It was an unforgivable thing for Dad to do, Mr. Rand," she said, "but at least you get the position."

"I do?" said Allan. "You're not going on the expedition too by any chance, are you?"

She nodded. "Then I'm mighty glad to take the job," he said.

"But tell me," Janet said to Allan, "what did you mean when you said you met me under another name in your dream?"

Allan reddened. "I'll tell you later," he said. "I'd rather wait until we're a little better acquainted before I tell you how well we know each other."

Green Glory

by Frank Belknap Long

Many years ago Frank Belknap Long wrote a series of stories of the extremely distant future, stories which presented different possibilities of the role of mankind in a vastly changed world. It is one thing to speculate about the next five years, fifty years, or even five thousand years. Five thousand years ago there were still civilizations not too different from our own. Fifty thousand years is a tougher sum—and a million years impossible to judge by any measuring stick we have. What was life actually like a million years ago when man was not man as we can understand him? What then will life be like a million years hence when man will also not be man as we know him? In "Green Glory" the poetic pen of Frank Long has played a sardonic trick with men and ants. You'll remember this strange story.

AS THE tiny human shapes poured alertly through the subterranean artery, sharp clicks emanated from the magnetic audition disk in the roof of the passage. The clicks announced that the bee swarms were preparing to wage gruesome and relentless war.

To the ant people and their tiny human servitors the bee army's dissolving fungus tissue was a menace that obscured the splendor of the sun and stars and the joys of shared labor in the sweet-smelling earth. In grim procession the midget shapes moved forward, and Atasmas sang and chanted as he led them. He sang of war and glory and sacrificial death. A huge yellow aphid sat perched on his gauze-cad shoulders and led him as he advanced.

In his inmost heart Atasmas despised the little stupid insect with its cumbersome clawed tarsi. He knew that wingless aphids had once served the ant hordes with complaisant humility far back in the dim legendary ages when his own race was the opposite of complaisant. The aphids were mere contented cattle, mere unthinking milk producers for the omniscient ant people.

Atasmas knew that he was nearly as insignificant as the aphids in the ant people's sight, but he knew also that his own little race had once wielded immense power on earth, holding all other animal forms in abject servitude. The aphids had never enslaved the hostile forces of nature, and had no idea of the majesty of the far-flung constellations and the vague, tender glory of the night shapes which visited men in dreams.

Deep in the earth, in luminous damp tunnels Atasmas' kind had labored,

dreamed, and died for millions of years, enduring their little May fly span of life with ardent heroism, and remaining unflaggingly devoted to the ants' exalted creeds, their world subduing techniques.

The ants were great. Even strong-willed men like Atasmas conceded it and were proud to serve as nurses for the large-brained grubs, as removers of excrement in the dark pits, and as relayers of such scented delicacies as the embalmed bodies of small spiders, roaches, and still smaller mammals.

Along the dump, glowing tunnel Atasmas marched, the triumphant head of the tiny human procession that had formed by itself in response to the sharp clicks in the circular magnetic disk in the roof of the tunnel.

"War formation—war formation—war formation," announced the revolving disk, and Atasmas had marshaled the others into a smoothly progressing service line, thirty abreast.

"A man should die gladly when the disks move," he chanted. "With singing and rejoicing he should merge his little worthless personality in the great dream. When men die in defense of the great dream, the eggs in the abdomen of the queen mother are preserved for a destiny so great that—"

The words froze suddenly on his lips. A circle of light appeared in the roof of the tunnel and a long, attenuated feeler fastened on his shoulder. The aphid hopped to the ground with a frightened screech.

Atasmas groaned and his little body stiffened. He knew that incompetent men were lifted at frequent intervals from the tunnel by the small workers and carried up through long arteries and vertical chambers to the directing queen mothers in their luminous cells.

At the thought of losing his comparative supremacy as a leader of his kind, Atasmas' brain grew numb. He had thought himself secure, for he had served always with alertness and efficiency. But many were the sins of omission which a man could commit almost unconsciously, and Atasmas was sick with the thought that he had perhaps violated some minor but important taboo.

The feeler laid him gently in repose in the center of an immense, chitin-armored back. Then the small worker began its slow ascent to the cells of the directing queens. From his vantage point on the insect's back, Atasmas was privileged to survey with swift wonder the war preparations in a hundred intervening cells.

He saw enormous, green bellied grubs resting with a kind of repressed fervor in long earthen trenches filled with fungus-dissolving ichors. Their soft, flabby bodies absorbed the ichors with a spongelike greediness, and Atasmas knew that when the bee swarms dropped their deadly fungal tissues the grubs would be impregnable. Though the fungus poison filtered down through the damp earth to the lowest of the nursery cells, the dissolving ichors would protect the young maggots.

Up through many cells Atasmas was carried. He saw enfeebled drones submitting with patient resignation to impregnation with the needle death. He knew that the drones would be spewed forth to mingle with the bee swarms and sow piercing agony in their midst. The needle death was a

microscopic animalcule that propagated with unbelievable rapidity and feasted on insect viscera.

Atasmas observed also huge, glistening black workers preening themselves for combat, and soldier ants with flattened heads a hundred feet in diameter which would be thrust into the enormous entrance vents above to serve as stop-gaps against the down-sweeping swarms of envenomed bees.

He knew that the heads would be battered into loathsome pulps, and that the thin, flabby bodies beneath would writhe in unspeakable agony as the bees parced them with their long stingers; but to the ant people death was a kind of rapturous dedication when it served a socially useful purpose.

Something of this same sacrificial zeal flamed in the mudget breast of the little creature on the insect's back. He, too, was part of the enormous dream, and he would have died to save the maggots intrusted to his care as selflessly as the ants who owned him.

There was an ominous vibratory stirring throughout the great central artery adjoining the cells of the directing queen mothers. Down it Atasmas was swiftly carried, his bearer moving with a sure-footed celerity uncommon in a small worker.

For several minutes dark dripping surfaces swept past his upturned gaze, and a peculiarly fragrant odor assailed his nostrils. Then the glow deepened about him, and the small worker came to an abrupt halt before a towering barrier of wax. The barrier was fifty feet in height, and it shone with a radiance as of burnished metal. Without hesitation the insect raised its elbowed feeler and tapped lightly upon it.

For an instant there was no response. Then the luminous partition bulged slowly outward, and the glistening globular head of a queen preening ant emerged through it. Instantly the head withdrew, and through the rent thus produced the small worker moved with reverence into the cell of the directing queen.

The queen cell was aglow with a soft blue radiance. As the little creature on the small worker's back looked upward at the enormous swollen bulk of the single occupant of the cell, a great wonder came upon him. The eight slender scarlet rings encircling the majestic insect's abdomen, and the green dots on her thoracic segments revealed that she was the supreme ruler of the colony, the great leader queen whose wisdom and power had filtered down as a legendary fable to the little human servitors in the depths.

The small worker turned slowly on its side, and Atasmas slid from its back onto the soft, moist loam which covered the floor of the cell. Quickly he struggled to arise, to stand with dignity before this great being, whose power was so immense, and whose attributes were so godlike and omniscient. But his foot slipped as he rose from his knees, and he toppled over backward on the soft loam.

He was rescued by the queen herself. Leaning slightly forward, she stretched forth a carving flagellum and set him gently on his feet. And then, as he stood staring reverently up at her, she laid the flagellum on his forehead and spoke to him in speech that surged in cool vibrations through his tiny human brain.

"You are wiser than all the others, little one. The others think first of themselves, but you think only of us. In your humble way you have the sublime, selfless mind of an insect."

In awed silence Atasmas continued to stare up into the great complex eyes, bulbous head, and swiftly pulsating thorax. A hundred feet above him she towered, and her immense, hairy abdomen bulged with its momentous burden of a hundred million eggs. Not even the planets in their courses were so awe provoking in Atasmas' sight.

"Even the very humble can sometimes be of service," said the queen mother.

Still looking up, Atasmas gestured with his hands. He made a sign speech which conveyed that he had no mind apart from her mind; that her willing was the light of his little human life.

The queen mother said: "Little one, the bee swarms are sweeping down upon us in envenomed fury. For a hundred million years they have thwarted our dream of universal world dominion."

Atasmas nodded, gestured, chanted. He understood. "You may use me as you will," he conveyed.

"I will have you carried to Agrahan where the bee swarms dwell in immense metallic hives," resumed the queen mother. "You are so small that you can creep unobserved between the legs of the soldier guardian bees. You will carry into the inmost core of the central hive a spore of flarra-esson."

Atasmas recoiled in horror. The color drained from his face and a tremor ran through him. Vague hints and rumors filtering down to the depths had obscurely revealed that flarra-esson was a terrible vegetable petrifactive that fossilized all animal tissue.

By a process of intensive hybridization the small workers had intensified the petrifactive principle of certain chlorophyll forming organisms of high evolutionary grade, and had produced a microscopic animal like plant so deadly and swift blossoming that it was a menace to the great dream itself.

It was rumored that a single spore or properly planted flarra-esson would overrun hives miles in extent and envelop in petrification a billion helpless bees in the course of a single terrestrial revolution. So prolific, indeed, was the growth of this malignant plant that its deadly course could not be checked by any means known to insects.

Though the servants of the great dream had created it, and knew its value as a war technique, they were not unaware that its successful use might envelop them in utter and abysmal ruin. Hitherto they had hesitated to employ it, just as long millenniums ago Atasmas' own race had refused to sanction certain deadly war gases in their hideous and sanguinary conflicts.

The queen mother noticed Atasmas' trepidation, and a note of reproach crept into her speech. "You will be destroyed, of course. But do you value your little life so highly?"

Atasmas experienced a sudden tragic sense of shame and guilt. He made a gesture of frantic denial as the queen resumed:

"You will plant the spore and remain until you are consumed by the

fossilizing growth. If you flee when you drop the spore, it may never blossom. The future of the great dream is in your little human hands."

There ensued a pause.

Then the queen said: "There is something I must warn you against. You will meet the night shapes—millions and millions of night shapes."

Atasmas' pulses leaped with a sudden wild joy "You mean I shall really see and touch the little ones who visit us in dreams?"

The queen assented. "You will see them, and touch them. They will light a great fire in your heart. But you must remember the dream and resist them. Millions of years ago, when we succored your poor frozen race, the night shapes seemed to us feeble, weak things. We refused to help them. We left them to perish beneath the weight of the antarctic glaciations, of the great flood of ice that swept equatorward from the pole. Only a few survived and were succored by the weak and sentimental bees."

Atasmas' eyes were wide with wonder. He asked: "But why do these small weak shapes still haunt our dreams?"

"Because men will always be primitive creatures," replied the queen mother. "Even though we have multiplied you by laboratory techniques for millions of years, the old, primitive love of women still burns in your veins. We cannot eradicate it. It is a source of weakness in your kind, and in that respect you are inferior to the aphids."

Atasmas affirmed: "I will not forget the great dream. I will harden my heart."

But something within him burst into song even as he promised. He would see the soft and consoling night shapes—see them, touch them.

He said with gestures: "I am ready to die for the great dream."

The queen removed her flagellum from his forehead. She leaned backward, and a satisfied stridulation issued from her thorax.

The little worker advanced, picked Atasmas up, and set him gently on its back. For an instant it swayed reverently before the great mother. Then it backed swiftly out of the cell. When it had disappeared through the aperture the queen preening and leaped swiftly forward and healed the breach with a glutinous exudate from its swiftly moving mandibles.

The small worker carried its now precious burden up through long tunnels to the surface of the earth. At the central entrance of the nest, four great soldier ants with flattened heads moved reverently aside as the solemn pair came into view. The queen mother had laid upon her little emissary a peculiar and sanctifying scent. He was no longer a leader of his little race in the depths. He had become the potential savior of the immense dream; almost an insect in his godlike selflessness and reverent dedication.

He was conscious of immense forces at war within him as he gazed upward at the star-flecked sky. Martial dedication and tenderness fought for supremacy in his breast; an immense, overwhelming tenderness when he thought of the night shapes, a tenderness curiously tempered with superiority and disdain and a sense of loyalty to the dream. The night shapes were

glorious, but did not the long night of extinction which would envelop him if he died in defense of the immense dream hold a greater glory?

The small worker turned on its side and Atasmas toppled to the earth. He arose in blinding moonlight, dazed and dazzled by the hard metallic brilliancy of the surface world. He stood waiting, scarcely daring to breathe, as the little worker rose on its hindmost legs and emitted a cloud chordotonal stridulation by rubbing its elbowed feelers violently against its shins and abdomen.

For a moment as the queer chafing sound increased in volume, he saw only the towering forms of the soldier ants, dark and glistening in the moonlight, and of the little workers beside him. Then an immense dark form came sweeping down upon him out of the darkness. It had a wing span of a hundred feet and its barrel shaped thorax shone with a luster as of frosted silver.

It came to rest a few yards from the earthen entrance with a loud, vibratory thrumming. Instantly the little worker approached and touched the summit of its globular head to the great bulging thorax of the arial form. The form quivered and grew still.

With competent celerity the small worker picked Atasmas up, carried him to the waiting form, and deposited him gently in a tiny cavity at the base of the creature's abdomen. Touching Atasmas' forehead with its feeler, it spoke to him in rhythmic speech which surged coolly through his brain.

"You will be carried to Agrahan," it said. "It will be a long, perilous flight. If a storm arises on the southern ocean you will emerge and drop swiftly to your death. The great winged one cannot carry you in a storm. If you perish, another spore of *flarraeson* will be prepared, and another winged one will carry another of your kind to Agrahan."

"Where is the spore?" asked Atasmas with excited gestures. Only his midjet head and shoulders emerged above the dark, hair lined cavity.

The little worker withdrew a few paces, turned upon its back, and fumbled for an instant with one of its foreclaws in the loose crevices of its underside. When it drew near again to Atasmas it was holding a small metallic cylinder. Atasmas took the cylinder with reverence and thrust it deeply into his gauze fashioned tunic.

The small worker touched its head again to the winged shape's thorax. A sudden, convulsive movement shook the great body. It moved spasmodically forward, reared with a roar and soared skyward. Fright and wild elation poured in ripples through Atasmas' brain.

He had never before viewed the kaleidoscopic skies of the surface world from such a perilous vantage point. Looking down, he saw far beneath him the mottled surfaces of earth, and looking up he saw the stars in their remote and awful solitude and the planets in their wheeling courses.

He saw the great white stars that would burn as brightly when the earth was a cinder, and suns that burned no more, but whose light would continue to encircle the pear shaped universe till the immense bubble burst, and time and space were merged in some utterly stupefying absolute for which neither Atasmas' kind nor the ants had any adequate symbol.

When Atasmas' gaze penetrated to the awful luminous fringes of the spiral

nebulae so great a pall enshrouded his spirit that he presently ceased to stare skyward. Far more reassuring was the checkerboard earth beneath, with its dark and glistening lakes, ragged mountains, and valleys crammed with lush and multihued vegetation.

The checkerboard earth was soon replaced by the turbulent waters of the great southern ocean. For thousands of miles Atasmias gazed downward at the shining water, wonder and fear fighting for ascendancy in his little human breast. No storm arose to check the smooth southward flight of the great insect.

On and on it flew in the warm darkness, five miles above the turbulent dark sea. Belching volcanoes and white coral shoals passed swiftly before Atasmias' vision. He saw the barnacle colonies in their ocean-breasting splendor, terraces of iridescent shell rising in immense tiers beside the storm-lashed waves.

And suddenly as he gazed, the ocean vanished, and a dark plateau covered with gray and yellow lichens usurped his vision.

The great winged one swept downward then. In immense circles it approached the leaden earth and came to rest on a gray, pebble-incrusted plain. For an instant its wings continued to pulsate with a loud, vibratory throbbing. Then the vibrations ceased, and a moist foreclaw arose and fumbled in the cavity where Atasmias rested.

The midget voyager was lifted out, and deposited on the dark earth. As he stood staring wildly about him, a feeler fastened on his forehead.

"I will not return without you, little one," conveyed the great winged shape. "When you plant the spore, come back to me quickly. There is no need for you to die. The spore will blossom without supervision if you plant it in rich, dark soil. I pity you, little one. I wish to help you."

Atasmias was stunned and frightened. He started back in amazement and looked up dimly at the great shape. "Why do you disobey the great mother?" he asked with tremulous gestures.

The winged form said: "We who fly above the earth do not obey the small ethics of your little world of tunnels. We have seen the barnacles in their majesty and the bees in their power, and we know that all things are relative. Go, and return quickly."

Atasmias went. With the glimmering lights of the enormous hives of Agrahan to guide him, he went swiftly to fulfill his destiny. Over the dark earth he moved, an infinitesimal shape in a world of menacing shadows. And as he advanced the lights of Agrahan grew brighter till he was enveloped in their radiance as in a bath of living flame.

But no one observed him. The sentinel bees were asleep at their posts at the entrance of the central hive, and quickly he passed between their legs which towered above him like pillars of fire in the darkness.

Inside the hive a luminous glow guided his footsteps. Moving with caution he ascended a terraced mound studded with several dozen yawning vents and entered one at random. The branching tunnel in which he found himself bore a superficial resemblance to the subterranean arteries of the ant people.

For hundreds of feet it stretched. Its smoothly rounded earthen walls were

gray-green in hue, and it had a flooring of moist, dark loam. Atamas hugged the walls, taking every precaution to avoid being seen. He was tremulous with apprehension as he moved forward. It seemed incredible that the great central hive should be destitute of life, yet all about him silence reigned. From far ahead a dim bluish radiance illumined the walls of the passage, but no moving shape crossed his vision.

He continued to move forward, little suspecting what lay ahead. The silence remained unbroken, and the only visible shadows were cast by his own insignificant form. It was not until he had advanced far into the tunnel that he encountered the dark mouth of the bisecting passage and the huge shape which filled it.

As the shape burst on his vision he sprang back in instinctive alarm, and a cry tore from his throat. But before he could retreat, the thing was upon him. It fell upon him, and enveloped him.

In frantic resistance Atamas' little hands lashed out. They encountered a spongy surface bristling with hairs—a loose, gelatinous surface which gave beneath the assaults of his puny fists. Screeching shrilly, the bee larva twined itself about him and pressed the breath from his body. He shrieked and hammered and tore at it with his fingers in an agony of terror. His efforts were of no avail. The bulk of the maggot was too enormous to cope with.

He was dimly aware of a menacing yellow lined orifice a yard from his face, spasmodically opening and closing. It drew nearer as he watched it and yawned above him. It twitched horribly with a dawning hunger.

Atamas lost consciousness then. His senses reeled before the awful menace of that sobbering puckered mouth, and everything went dark about him.

He never knew what saved him until he found himself getting slowly to his feet in a confused daze. The first sight which usurped his blurred vision was the bee larva lurching cumbrously away from him down the tunnel, emitting shrill screeches as it retreated. Then his gaze fastened in wonder on the night shape.

She stood calmly in the center of the tunnel, a form as tiny as himself, but with a sweetness and grace about her that stirred inexplicable emotions within him. She was holding a long, many thonged goad, which dripped with nauseous yellow ichor.

As Atamas stood staring, his clearing faculties apprehended with uncanny accuracy her true function in the colony of bees. She was obviously a kind of guardian of the large stupid maggot, and the goad in her hands was an implement of chastisement. In defense of Atamas' little helpless person she had repudiated her function, had flailed the grub unmercifully. It was a triumph of instinctive over conditioned behavior.

In gratitude and awe Atamas drew near to her. She did not retreat, but raised the weapon in warning as he moved to touch her. Something snapped in Atamas' brain. The wonder of her, standing there, awoke a great fire in his breast. He had to touch her, though he died for it.

He touched her arm, her forehead. With a cry of utter dumbfounderment she dropped the goad and her eyes widened. Without uttering a sound, Atamas moved even closer and took her in his arms. She did not resist.

A great joy flooded Atasmas' being. For a moment he forgot the past and the sublime destiny toward which he moved. He stood there in silence, transfigured, transformed.

Then, suddenly, he remembered again. Even as ecstasy enveloped him he remembered the great queen, the nursery artery of the ant people, his selfless function as a servitor in the depths, and the great dream. Deep within him, in the dark depths of his little racial under-mind, the old loyalties flared up.

His hand went to his tunic and emerged with the cylinder. With an effort he tore his gaze from the rapt, upturned face of the night shape and fastened it on the soft loam beneath his feet.

With swift calculation he estimated the depth and consistency of the dark soil. For a brief, momentous instant he seemed to hesitate. Then, with a wrench, he unscrewed the cylinder and released the spore of flaura eson.

He continued to gaze deep into the woman's eyes in reverence and rapture as the tiny green spore took root, sprouted, and spread out in a dark petri-factive shroud.

Far away the great winged shape waited with thrumming wings as a green growth immortalized two lovers without pain in the central tunnel of the great hive of Agrahan.

The growth spread upward and enveloped the little human forms, darkly, greenly, and so absorbed was Atasmas in the woman in his arms that he did not know that he was no longer of flesh and blood till the transforming plant reached the corridors of his brain and the brain of his companion.

And then the transition was so rapid that he did not agonize, but was transformed in an instant, and remained forever wrapped in glory and a shroud of deepest green.

The Immeasurable Horror

by Clark Ashton Smith

Clark Ashton Smith is best known for those stories of his which are most completely removed from any basis of scientific speculation—brilliant word fantasies out of time and space. Occasionally, however, he has ventured down from his stars to dip his pen into the ultra-mundane horrors of Earth's neighboring worlds. For him, these worlds shriek of the unforeseen and unforeseeable dangers that man, born and bred on a comparatively friendly sphere, cannot face. Indeed, what plant or animal however simple and tiny on a planet such as Venus shares ancestry with Terrestrials—who at least must have originated all together in the same puddle of Earthly primordial slime? They are alien in a sense of the word that only the pioneer space explorers will ever fully understand.

I DO NOT mean to boast when I say that cowardice has never been among my failings. It would be needless to boast, in view of my honorable record as an ether-ace in six interplanetary expeditions. But I tell you that I would not return to Venus for any consideration—not for all the platinum and radium in its mountainsides, nor all the medicinal saps and pollens and vegetable ambergris of its forests. There will always be men to imperil their lives and their sanity in the Venusian trading posts, and fools who will still try to circumnavigate a world of unearthly dangers. But I have done my share, and I know that Venus was not designed for human nerves or human brains. The loathsome multiform fecundity of its overheated jungles ought to be enough for any one—not to mention the way in which so many posts with their bulwarks of iron-manganese steel have been wholly blotted out between the departure of one space freighter and the arrival of the next. No, Venus was not meant for man. If you still doubt me, listen to my story.

I was with the first Venusian expedition, under the leadership of Admiral Carfax, in 1977. We were able to make no more than a mere landing, and were then compelled to return earthward because of our shortage of oxygen, due to a serious miscalculation regarding our needs. It was unsafe, we found, to breathe the thick, vapor-laden air of Venus for more than short intervals; and we couldn't afford to make an overdraft on our tanks. In 1979 we went back, more fully equipped for all contingencies this time, and landed on a high plateau near the equator. This plateau, being comparatively free from the noxious flora and fauna of the abysmal steaming jungles, was to form the base of our explorations.

I felt signally honored when Admiral Carfax put me in charge of the planetary coaster whose various parts had been brought forth from the bowels of the huge ether ship and fitted together for local use. I, Richard Harmon, was only an engineer, a third assistant pilot of the space vessel, with no claim whatever to scientific renown; and the four men entrusted to my guidance were all experts of international fame. They were John Ashley, botanist, Aristide Rocher, geologist, Robert Manville, biologist and zoologist, and Hugo Markheim, head of the Interplanetary Survey. Carfax and the remaining sixteen of our party were to stay with the ether ship till we returned and made our report. We were to follow the equator, landing often for close observations, and make, if feasible, a complete circuit of the planet. In our absence, a second coaster was to be fitted together, in preparation for a longitudinal voyage around the poles.

The coaster was of that type which is now commonly used for flying at all levels within the terrestrial atmosphere. It was made of neonin tempered aluminum, it was roomy and comfortable, with ports of synthetic crystal tougher than steel, and could be hermetically closed. There were the usual engines run by explosive atomic power, and a supplementary set of the old electro-solar turbines in case of emergency. The vessel was fitted with heating and refrigerating systems, and was armed with electronic machine guns having a forty mile range; and we carried for hand weapons a plentiful supply of infra red grenades, of heat-tubes and zero tubes, not knowing what hostile forms of life we might encounter. These weapons were the deadliest ever devised by man; and a child could have wiped out whole armies with them. But I could smile now at their inadequacy. . . .

The plateau on which we had landed was far up in a range which we named the Purple Mountains because they were covered from base to summit with enormous two foot lichens of a rich Tyrian hue. There were similarly covered areas in the plateau, where the soil was too thin for the sustenance of more elaborate plant forms. Here, among the multitudinous geysers, and the horned, fantastic peaks that were intermittently visible through a steam-charged atmosphere, we had established ourselves in a lichen field. Even here we had to wear our refrigerating suits and carry oxygen whenever we stepped out of the ether-ship; for otherwise the heat would have parboiled us in a few minutes, and the ultra-terrestrial gases in the air would have speedily overpowered us. It was a weird business, putting the coaster together under such circumstances. With our huge inflated suits and masks of green vitrolum, we must have looked like a crew of demons toiling in the fumes of Gehenna.

I shall never forget the hour when the five of us who had been chosen for that first voyage of discovery said good bye to Admiral Carfax and the others and stepped into the coaster. Somehow, there was a greater thrill about it than that which attended the beginning of our trip through sidereal space. The 23,000 miles of our proposed circuit would of course be a mere bagatelle; but what marvels and prodigies of unimagined life or landscape might we not find! If we had only known the truth! . . . but indeed it was fortunate that we could not know. . . .

Flying very slowly, as near to the ground as was practicable, we left the plateau and descended through a long jungle invaded pass to the equatorial plains. Sometimes, even when we almost grazed the jungle tops, we were caught in voluminous rolling masses of cloud; and sometimes there were spaces where we could see dimly ahead for a few miles, or could even discern the white hot glaring of the dropsical sun that hung perpetually at zenith.

We could get only a vague idea of the vegetation beneath us. It was a blurred mass of bluish and whitish greens, of etiolated mauves and saffrons tinged with pale. But we could see that the growths were of unearthly height and density, and that many of them had the character of calamites and giant grasses rather than trees. For a long while we sought vainly an open space in which to alight and begin our investigations.

After we had flown on for an hour or two above the serried jungle, we crossed a great river that couldn't have been so very far below the boiling point, to judge from the columns of steam that coiled upward from it. Here we could measure the height of the jungle, for the shores were lined with titanic reeds marked off in ten yard segments, that rose for a hundred yards in air, and were overshadowed by the palm ferns behind them. But even here there was no place for us to descend. We crossed other rivers, some of which would have made the Amazon look like a summer creek; and we must have gone on for another hour above that fuming everlasting forest ere we came to a clear spot of land.

We wondered about that clearing, even at first sight. It was a winding mile wide swath in the jungle, whose end and beginning were both lost in the vapors. The purplish soil seemed to have been freshly cleared, and was clean and smooth as if a whole legion of steam-rollers had gone over it. We were immensely excited, thinking that it must be the work of intelligent beings—of whom, so far, we had found no slightest trace.

I brought the coaster gently down in the clearing, close to the jungle's edge; and donning our refrigerating suits and arming ourselves with heat-tubes, we unscrewed the seven inch crystal of the manhole and emerged.

The curiosity we felt concerning that clearing was drowned in our wonder before the bordering forest. I doubt if I can give you any real idea of what it was like. The most exuberant tropical jungle on earth would have been a corn patch in comparison. The sheer fertility of it was stupendous, terrifying, horrifying—everything was overgrown, overcrowded, with a fulsome rankness that pushed and swelled and mounted even as you watched it. Life was everywhere, seething, bursting, pululating, roiling. I tell you, we could actually see it grow and decay, like a slow moving picture. And the variety of it was a botanist's nightmare. Ashley cursed like a longshoreman when he tried to classify some of the things we found. And Minville had his problems, too, for all sorts of novel insects and animals were flopping, crawling, crashing and flying through the monstrous woods.

I'm almost afraid to describe some of those plants. The overlooming palm ferns with their poddy fronds of unwholesome mauve were bad enough. But the smaller things that grew beneath them, or sprouted from their boles and joints! Half of them were unspeakably parasitic; and many were plainly

sarcophagous. There were bell shaped flowers the size of wine-barrels that dripped a paralyzing fluid on anything that passed beneath them; and the carcasses of flying lizards and strange legless mammals were rotting in a circle about each of them, with the tips of new flowers starting from the putrefaction in which they had been seeded. There were vegetable webs in which squirming things had been caught—webs that were like a tangle of green, hairy ropes. There were broad, low-lying masses of fungoid white and yellow, that yielded like a bog to suck in the unwary creatures that had trodden upon them. And there were orchids of madly grotesque types that rooted themselves only in the bodies of living animals; so that many of the fauna we saw were adorned with floral parasites.

Even though we were all armed with heat tubes, we didn't care to go very far in those woods. New plants were shooting up all around us, and nearly everything, both animal and vegetable, seemed to have alimentary designs upon us. We had to turn our heat tubes on the various tendrils and branches that coiled about us; and our suits were heavily dusted with the white pollen of carnivorous flowers—a pollen that was anesthetic to the helpless monsters on which it fell. Once a veritable behemoth with a dinosaur-like head and forelegs, loomed above us suddenly from the ferns it had trampled down, but fled with screams of deafening thunder when we leveled our heat rays upon it till its armored hide began to sizzle. Long legged serpents larger than anacondas were stalking about; and they were so vicious, and came in such increasing numbers, that we found it hard to discourage them. So we retreated toward the coaster.

When we came again to the clearing, where the soil had been perfectly bare a few minutes before, we saw that the tips of new trees and plants were already beginning to cover it. At their rate of growth, the coaster would have been lost to sight among them in an hour or two. We had almost forgotten the enigma of that clearing, but now the problem presented itself with renewed force.

"Harmon, that swath must have been made within the last hour!" exclaimed Manville to me as we climbed back into the vessel behind the others.

"If we follow it," I rejoined, "we'll soon find who, or what, is making it. Are you fellows game for a little side trip?" I had closed the manhole and was now addressing all four of my companions.

There was no demur from any one, though the following of the swath would mean a diagonal divagation from our set course. All of us were tense with excitement and curiosity. No one could venture a surmise that seemed at all credible, concerning the agency that had left a mile-wide trail. And also we were undecided as to the direction of its progress.

I set the engines running, and with that familiar roar of disintegrating carbon atoms in the cylinders beneath us, we soared to the level of the fern-tops and I steered the coaster along the swath in the direction toward which its nose happened to be pointing. However, we soon found that we were on the wrong track; for the new growth below us became disproportionately taller and thicker, as the mighty jungle sought to refill the gap that had been

cloven through its center. So I turned the coaster, and we went back in the opposite direction.

I don't believe we uttered half a dozen words among us as we followed the swath, and saw the dwindling of the plant tops below till that bare purplish soil reappeared. We had no idea what we would find; and we were now too excited even for conjecture. I will readily admit that I, for one, felt a little nervous—the things we had already seen in the forest, together with that formidable recent clearing which no earthly machinery could have made, were enough to unsettle the equilibrium of the human system. As I have said before, I am no coward, and I have faced a variety of ultra-terrene perils without flinching. But already I began to suspect that we were among things which no earth-being was ever meant to face or even imagine. The hideous fertility of that jungle had almost sickened me. What, then, could be the agency that had cleared the jungle away more cleanly than a harvester running through a grain field?

I watched the vapor-laden scene ahead in the reflector beside me, and the others all had their faces glued to the crystalline ports. Nothing untoward could be seen as yet; but I began to notice a slight, unaccountable increase of our speed. I had not increased the power—we had been running slowly, at no more than one hundred and fifty miles per hour; and now we were gaining, as if we were borne in the sweep of some tremendous air-current or the pull of a magnetic force.

The vapors had closed in before us; now they eddied to each side, leaving the landscape visible for many miles. I think we all saw the Thing simultaneously; but no one spoke for a full thirty seconds. Then Manville muttered, very softly: "My God!"

In front, no more than a half mile distant, the swath was filled from side to side with a moving mass of livid angleworm pink that rose above the jungle-tops. It was like a sheer cliff before us as we flew toward it. We could see that it was moving away from us, was creeping onward through the forest. The mass gave the impression of a jelly-fish consistency. It rose and fell, expanding and contracting in a slow rhythmic manner, with a noticeable deepening of color at each contraction.

"Life!" murmured Manville. "Life, in an unknown form, on a scale that would not be possible in our world."

The coaster was now rushing toward the worm-colored mass at more than two hundred miles an hour. A moment more, and we would have plunged into that pulsating wall. I turned the wheel sharply, and we veered to the left and rose, with an odd sluggishness above the jungle, where we could look down. This unexpectedness worried me, after our former headlong speed. It was as if we were fighting some new gravitational force of an unexampled potency.

We all had a feeling of actual nausea as we gazed down. There were leagues and leagues of that living substance; and the farther end was lost in the fanning vapors. It was moving faster than a man could run, with that horribly regular expansion and contraction, as if it were breathing. There

were no visible limbs or appendages, no organs of any distinguishable kind; but we knew that the thing was alive and aware.

"Fly closer," whispered Manville. Horror and scientific fascination contended in his voice.

I steered diagonally downward, and felt an increase of the strange pull against which we were fighting. I had to reverse the gears and turn on more power to prevent the vessel from plunging headlong. We hung above the pink mass at a hundred yard elevation and watched it. It flowed beneath us like an unnatural river, in a flat, glistening tide.

"*Voyez!*" cried Rocher, who preferred to speak in his native tongue, though he knew English as well as any of us.

Two flying monsters, large as pterodactyls, were now circling above the mass not far below us. It seemed as if they, like the vessel, were struggling against a powerful downward attraction. Through the air tight sound valves we could hear the thunderous beating of their immense wings as they strove to rise and were drawn gradually toward the pink surface. As they neared it, the mass rose up in a mighty wave, and in the deep mouth-like hollow that formed at the wave's bottom a colorless fluid began to exude and collect in a pool. Then the wave curved over, caught the struggling monsters, and lapsed again to a level, slowly palpitating surface above its prey.

We waited a little; and I realized suddenly that the onward flowing of the mass had ceased. Except for that queer throbbing, it was now entirely quiescent. But somehow there was a deadly menace in its tranquillity, as if the thing were watching or meditating. Apparently it had no eyes, no ears, no sense-organs of any sort; but I began to get the idea that in some unknowable manner, through senses beyond our apprehension, it was aware of our presence and was considering us attentively.

Now, all at once, I saw that the mass was no longer quiescent. It had begun to rise toward us, very stealthily and gradually, in a pyramidal ridge; and at the ridge's foot, even as before, a clear, transparent pool was gathering.

The coaster wavered and threatened to fall. The magnetic pull, whatever it was, had grown stronger than ever. I turned on fresh power; we rose with a painful, dragging slowness, and the ridge below shot abruptly into a pillar that loomed beside us and toppled over toward the vessel.

Before it could reach us, Manville had seized the switch that operated one of the machine-guns, had aimed it at the pillar and released a stream of disintegrative bolts that caused the overhanging menace to vanish like a melting arm of cloud. Below us the pyramidal base of the truncated pillar writhed and shuddered convulsively, and sank back once more into a level surface. The coaster soared dizzily, as if freed from a retarding weight, and reaching what I thought would be a safe elevation, we flew along the rim of the mass in an effort to determine its extent. And as we flew, the thing began to glide along beneath us at its former rate of progression.

I don't know how many miles of it there were, winding on through that monstrous jungle like a glacier of angleworm flesh. I tell you, the thing made me feel as if my solar plexus had gone wrong. It was all I could do to steer the coaster. There was neither head nor tail to that damnable mass, and

nothing anywhere that we could identify as special organs; it was a weltering sea of life, of protoplasmic cells organized on a scale that staggered all the preconceptions of biology. Manville was nearly out of his senses with excitement; and the rest of us were so profoundly shocked and overwhelmed that we began to wonder if the thing were real, or were merely an hallucination of nerves disordered by novel and terrific planetary forces.

Well, we came to the end of it at last, where the pink wave was eating its way through the jungle. Everything in its path was being crushed down and absorbed—the four hundred foot ferns, the giant grasses, the grotesque carnivorous plants and their victims—the flying, waddling, creeping and striding monsters of all types. And the thing made so little sound—there was a low murmuring like that of gently moving water, and the snap or swish of trees as they went down, but nothing more.

"I guess we might as well go on," observed Manville regretfully. "I'd like to analyze a section of that stuff; but we've seen what it can do; and I can't ask you to take any chances with the coaster."

"No," I agreed, "there's nothing to be done about it. So, if you gentlemen are all willing, we might as well resume our course."

I set the vessel back toward the equator, at a goodly speed.

"Christ! that stuff is following us!" cried Manville a minute later. He had been watching from a rear port.

Intent on steering forthrightly, it had not occurred to me to keep an eye on the thing. Now I looked into the rear reflector. The pink mass had changed its course, and was crawling along behind us, evidently at an increased rate of progression, for otherwise we would have been out of sight by now.

We all felt pretty creepy, I assure you. But it seemed ridiculous to imagine that the thing could overtake us. Even at our moderate speed, we were gaining upon it momentarily; and, if need be, we could treble our rate or soar to higher atmospheric levels. But even at that the whole business made a very disagreeable impression.

Before long we plunged into a belt of thick vapors and lost sight of our pursuer. We seemed to be traversing a sort of swamp, for we caught glimpses of titan reeds and mammoth aquatic plants amid winding stretches of voluminously steaming water. We heard the bellow of unknown leviathans, and saw the dim craning of their hideous heads on interminable necks as we passed. And once the coaster was covered with boiling spray from a marsh-geyser or volcano, and we flew blindly till we were out of it again. Then we crossed a lake of burning oil or mineral pitch, with flames that were half a mile in height; and the temperature rose uncomfortably in spite of our refrigerating system. Then there were more marshes, involved in rolling steam. And after an hour or two we emerged from the vapors, and another zone of prodigiously luxuriant jungle began to reveal its fronded tops below us.

Flying over that jungle was like moving in a hashish eternity. There was no end to it and no change—it simply went on and on through a world without limits or horizons. And the white, vaporous glare of the swollen

sun, ever at zenith, became a corroding torture to nerves and brain. We all felt a terrific fatigue, more from the nervous tax than anything else. Manville and Roher went to sleep, Markheim nodded at his post, and I began to watch for a place where I could bring the coaster safely down and take a nap myself. The vessel would have kept its own course, if I had set the gears, but I didn't want to miss anything, or take any chance of collision with a high mountain-range.

Well, it seemed there was no place to land in that interminable bristling wilderness of cyclopean growths. We flew on, and I grew sleepier and sleepier. Then, through the swirling mists ahead, I saw the vague looming of low mountains. There were bare, needle sharp peaks and long, gentle scours of a blackish stone, almost entirely covered with red and yellow lichens taller than heather. It all looked very peaceful and desolate. I brought the coaster down on a level shelf of one of the scours, and fell asleep almost before the heavy thudding of the engines had died.

I don't know what it was that awakened me. But I sat up with a start, with a preternaturally distinct awareness that something was wrong. I glanced around at my companions, who were all slumbering quietly. And then I peered into the reflectors, where the entire landscape about us was depicted.

I was unable to believe it for a moment—that worm colored glacier that had crawled up the scarp beneath us, and was now hanging over the vessel like a sheer, unmeasurable, flowing precipice. It had reached out in mighty arms on either side, as if to surround us. It seemed to blot out the misty heavens as it hung there, pulsing and darkening and all a slaver with rills of a hueless fluid from the mouths that had formed in its front. I lost a few precious seconds ere I could start the atomic engines; and as the vessel rose, the top of that loathsome cliff lengthened out and fell over like the crest of a breaking billow. It caught us with a buffeting shock, it enveloped us, we went down tossing and pitching as into a sea trough, and our interior grew dark and blind till I switched on the lights.

The vessel was now lurching nose downward, as that unbelievable wave sucked it in. My companions were awake, and I shouted half incoherent orders to them as I turned on the full power of our cylinders and also set the electro-solar turbines going. The sides and ceiling of the coaster seemed to bend inward with the pressure as we sought to wrench ourselves free. My companions had flown to the machine guns, they pumped them incessantly, and bolts of electronic force tore like a broadside of lightning into the mass that had engulfed us. We tried literally to blast ourselves out, with each gun revolving at the widest possible radius. I don't know how it was ever done, but at last the pressure above us began to give, there was a glimmering of light through our rear ports, and pitching dizzily, we broke loose. But even as the light returned, something dripped on my bare arms from the ceiling—a thin rill of water clear fluid that seared like vitriol and almost laid me out with the sheer agony as it ate into my flesh. I heard some one scream and fall, and turning my head, saw Manville writhing on the floor beneath a steady drip of the same fluid. The roof and walls of the coaster were rent in several places, and some of the rifts were widening momentarily. That execrable liquid,

which doubtless served as both saliva and digestive juice, had been eating the adamantine tempered metal like acid, and we had not escaped any too soon.

The next few minutes were worse than a whole herd of nightmares. Even with our double engine power, even with the machine guns still tearing at the mass beside us, it was a struggle to get away, to combat the malign extra-gravitational magnetism of that hellish life substance. And all the while, Venustian air was pouring in through the rents and our atmosphere was becoming unbreathable. Also the refrigerating system was half useless now, and we sweltered in a steaming inferno, till each of us donned his air-tight insulative suit in turn, while the others held to the guns and the steering. Manville had ceased to writhe, and we saw that he was dead. We would not have dared to look at him overlong, even if there had been time; for half his face and body were eaten away by the corroding liquid.

We soared gradually, till we could look down on the horror that had so nearly devoured us. There it was, mile on mile of it stretching up the mountainside, with the farther end somewhere in the jungle below. It seemed impossible, in view of the distance we had traversed, that the thing was the same life mass we had met earlier in the day. But whatever it was, it must have smelt us out somehow; and seemingly it didn't mind scaling a mountain to get us. Or perhaps it was in the habit of climbing mountains. Anyway, it was hard to discourage, for our gun-fire seemed to make mere pinholes in it that closed up again when the gunner's aim shifted. And when we started to drop grenades upon it from our hard won elevation, it merely throbbed and heaved a little more vehemently, and darkened to a cancerous red as if it were getting angry. And when we flew off on the way we had come, toward the jungle and the swamp beyond, the damnable thing started to flow backward beneath us along the lichen-mantled slope. Evidently it was determined to have us.

I reeled in the seat with the pain of my seared arms as I held our course. We were in no condition to continue the circuit of Venus; and there was nothing for it but a return to the Purple Mountains.

We flew at top speed, but that flowing mass of life—protoplasm, organism, or whatever it was—fairly raced us. At last we got ahead of it, where it slithered in mile-wide devastation through the jungle—but not very far ahead at that. It hung on interminably, and we all grew sick with watching it.

Suddenly we saw that the thing had ceased to follow us, and was veering off at a sharp angle.

"What do you make of that?" cried Markheim. We were all so amazed by the cessation of pursuit, that I halted the vessel and we hung in midair, wondering what had happened.

Then we saw. Another endless mass, of a vermin-like gray, was crawling through the jungle to meet the pink mass. The two seemed to rise up in sheer columns, like warring serpents, as they neared each other. Then they came together; and we could see that they were battling, were devouring each other, were gaining and losing alternately as they flowed back and forth in a huge area from which all vegetation was speedily blotted. At length

the pink mass appeared to have won a decisive victory; it poured on and on, without cease, ingesting the other, driving it back. And we watched no longer, but resumed our flight toward the Purple Mountains.

I have no very distinct recollection of that flight: it is all a blur of incalcescent vapors, of boundless, fuming forests, of blazing bitumen lakes and volcano-spouting marshes. I lived in a reeling eternity of pain, sickness, vertigo; and, toward the last, a raging delirium in which I was no longer aware of my surroundings, except by fits and starts. I don't know how I held on, how I kept the course: my subliminal mind must have done it, I suppose. The others were all pretty sick, too, and could not have helped me. I seemed to be fighting an immeasurable, formless monster in that delirium; and after a dozen hours of inconclusive combat, I came out of it long enough to see that the Purple Mountains were jutting their horns from the vapors just ahead. Dully I steered along the jungle-taken pass and across the plateau; and the glaring heavens turned to a sea of blackness, a sea that fell and bore me down to oblivion as I landed the coaster beside the glimmering bulk of the ether ship.

Somehow, very tortuously and vaguely, I floated out of that sea of blackness. I seemed to take hours in regaining full awareness, and the process was painful and confusing, as if my brain were unwilling to function. When I finally came to myself, I was lying in my bunk on the ether ship, and Admiral Carfax and the two doctors of the expedition were beside me, together with Markheim and Rocher. They told me I had been unconscious for fifty hours. My collapse, they thought, had been partly due to unnatural nerve strain and shock. But my arms were both in a terrible state from the ravages of the vitriolic animal fluid that had dripped upon them. It had been necessary to amputate my left arm at the elbow; and only the most skilful care had saved the other from a like fate. My companions, though ill to the point of nausea, had retained consciousness, and had told the story of our unbelievable adventures.

"I don't see how you drove the coaster," said Carfax. This, from our reticent and praise-sparing chief, was an actual brevet.

My right arm was a long time in healing—indeed, it never became quite normal again, never regained the muscular strength and nervous quickness required for aviation or space flying. And I wasn't so sorry, either: my nerves were badly shaken; and I was content to let others do their share, when the holes in the acid-eaten coaster had been calked with metal melted by our heat tubes, and another exploring party was sent out along the equator.

We waited for a hundred hours on the plateau in the Purple Mountains; but the coaster didn't return. Radio communication with it had ceased after the first nine hours. The second coaster was put together, and went out with Admiral Carfax himself in charge. Markheim and Rocher also insisted on going along. We kept in touch with the vessel till it began to approach the enormous tundras in which the sunlit hemisphere of Venus terminates, and beyond which are the frozen realms of perpetual twilight and darkness. The radio reports were full of incredible things, and I won't tell you how many of those moving life-masses were sighted, eating their way through the

hideously fertile jungles or crawling out of the steam-enveloped Venusian seas that gave them birth. Nothing, however, was found of the first coaster. Then the reports ceased; and a black horror settled upon us who had remained in the ether-ship.

The huge space vessel was ill-adapted to horizontal flight within atmospheric levels. But we set out anyway, and tried to find the coasters, though we all knew there could no longer be anything to find. I won't detail our trip: we all saw enough to turn our stomachs permanently; and those horrors of immeasurable life were sweet and charming in comparison with some of the things that our searchlights revealed on the dark side of the planet. . . . Anyhow, we gave it up at last, and came back to earth. And I, for one, have been well satisfied to remain on Terra Firma. Others can do the exploring, and work the Venusian mines and plantations. I know too well the fate of those lost parties and their vessels. And I know what has happened to the warehouses of neo-manganese steel that have utterly disappeared and have been replaced by a half-grown jungle.

The Morrison Monument

by Murray Leinster

Time travel is one of those things about which endless conjecture is possible. If we can move forward in time, can we move backwards? The answer logically appears always to be no. For if we go back to times already lived, we can "unlive" these events, we can unravel the wool of history, personal or cosmic, and thereby effect and destroy the future from which we came. But we can move forward in time, that we know, because we do. The universe moves forward in time at the rate of sixty seconds a minute. The question Murray Leinster poses is can we accelerate our speed forward in time? In this story he says yes, and paints a picture of what it would look like. It will give our readers grounds for thought.

SOME TIME in 1957, probably, the Morrison Monument will be very much in the way of a widening of Amsterdam Avenue. By the end of the twentieth century it will undoubtedly come up before the New York Board of Aldermen—if that legislative body is still in existence—as a nuisance.

And during the twenty-third century guides will be telling tourists—if they have such things then—a remarkably garbled story to account for whatever form the Monument has taken by that time. Perhaps even in the thirtieth century, or the fortieth, somebody will still be able to tell some sort of fiction to explain it. But this is what really happened.

The Morrison Monument, you understand, does not yet exist. This is August, and the thing dates back only to last September. What will some day be the center of a probably stately pylon is now planked up atop tall scaffolding. The planking is supposed to hide the reason for the Monument even from small boys in the tree-climbing stage of their development.

It doesn't, and already there are murmurings.

Something has to be done to protect youthful minds from the shock they are able to secure by climbing thirty feet up on open scaffolding, swinging out a plank which is insecurely nailed—it is on the northeast corner of the elevated box—and climbing in the hole thus formed to lift up the tarpaulin cover inside. Something positively has to be done.

So I suspect that a monument association will be formed with an impressive chairman and committees on plans and finance.

I am afraid, though, that funds will not be forthcoming until people really understand about Morrison, and about Craig, and why the Monument not only must be but should be built. Hence the story.

CHAPTER I

THE IMPOSSIBLE HAPPENS

The tale begins, most likely, with certain startling bursts of light seen for several nights in succession on Nassau Street. The first was seen by Patrolman Blunt on the night of September 8th. He was walking his beat in the financial district of New York. All the world was dark and still and silent, and the only sounds were those of Patrolman Blunt's own shoesoles upon concrete sidewalk. The atmosphere was one of utter calm and restfulness. Then the first light came. It was a flash of white, unbearable brilliance in empty air some three feet above the pavement and a little beyond the curbstone. The light was instantaneous. It was, and then it disappeared. Patrolman Blunt had an impression of something dark and angular below the light, and he distinctly saw a rectangular shadow underneath. Then he saw nothing whatever. He reported it on his beat phone, and a squad-car came to investigate. It found nothing wrong, and so reported.

On the night of September 9th Patrolman Isaacson saw exactly the same thing. The light was in the same place, in front of the windows of the branch office of the *Financial Daily*. Those windows had front pages of the latest edition of the *Daily* gummed up on the plate glass, and the sheets of newsprint glowed blindingly bright. The time was 4:30 A.M. Again a squad-car investigated without result.

On the night of the 10th the same thing happened at half past two in the morning. On the 11th, at 9 P.M. In short, for seven nights in succession, during the hours when the financial district is utterly deserted, an unbearably brilliant flash of white light manifested itself before the Nassau Street office of the *Financial Daily*.

In each case it was utterly soundless. In each case there was apparently a dark object below the source of the light. In each case a rectangular shadow appeared underneath. And in each case there was absolutely nothing to explain it.

The only comment ever made that had any bearing on the matter as later revealed was a newspaper photographer's report. He had been sent to get a picture of the seventh—and as it turned out, the last—of those flashes.

"Nothin' but a light," he reported. "Looked like somebody settin' off a flash bulb to take a picture by. There's no story in it."

The first part of the report was intelligent. The last part was wrong. There was a story there. It was, of course, the story of Craig and Morrison—and Morrison's very improbable camera. And incidentally it was the story of the Morrison Monument, which some day will be built.

Craig was in his office when Morrison was shown in for the first time. This was a week before the earliest of the flashes. It was the 1st of September, and a clear, lambent sunshine shone upon all of New York out beyond the office windows. Craig could look out and down upon a myriad roofs, and on tall towers like the one in which he sat. There were little plumes of steam rising here and there above these roofs, and in the canon like streets below there were many oblong objects which were cars.

By going close to the window he could look down, and down, and feel a sort of incipient vertigo. To a man in Craig's situation of the moment that vertigo was almost an invitation. He would have only to raise the window and remove the slanting sheet of glass which keeps a blast of wind from blowing in when one wants only ventilation. Then he could lean out—and it would not even take courage to fall. The vertigo would take care of that.

Craig, just then, was in a situation which made such items almost attractive. His partner, Ballinger, had committed suicide three weeks before, it was said, and there was a good deal of delay in the payment of his life-insurance to the firm's account. And the firm needed it. It was a big sum, but it would just about take care of several clamorous customers who insisted that somebody had been gambling with their money. Unpleasant rumors were going about concerning the Ballinger and Craig brokerage firm, anyhow. Ballinger's suicide had added to them, and there was a good deal of reason for Craig to look down, and down, and savor the vertigo that would make falling so easy. But his lips and forehead felt chilly every time he thought of it.

Then Morrison was shown in. He was a rather plump little man with an apologetic manner. He stood just inside the door and waited for Craig to notice him. He had a small portfolio in his hand and he looked nervous but resolute. Craig turned to him, automatically putting on his cordial to customers manner.

"Mr. Morrison? How do you do? You're thinking of opening an account with us? I'll be glad—"

Morrison shook hands awkwardly. He sat down. He fidgeted, and then opened his portfolio and started to pull a big envelope out of it.

"I—er—before we talk business," he said uncertainly, "I think I'd better make myself clear. I know nothing of business, and especially of stocks and such things. But I want to do some dealing in them, and I need advice."

"Advice on investment, of course," said Craig. He wished he could forget that window and the drop beyond it. "You don't want to speculate."

"I do want to speculate," said Morrison, blinking painfully. "And yet I don't. That is, it won't be speculating. I want to do some stock market dealing on—well—call it advance information."

"There's no such thing," said Craig. He'd thought there was, and in consequence his partner was said to be a suicide, while Craig took a tense interest in the long drop outside of windows. "All the information a speculator gets," he added without any mirth at all, "is post mortem."

Morrison had listened only half heartedly. He was getting out the contents of the big envelope from his portfolio. He chose one sheet and laid it on the desk. It was a photographic print.

"I said I'd have to explain," said Morrison painfully. "Would you mind looking at this picture?"

Craig glanced at it. It was a very clear but quite uninteresting picture of part of a newsstand, with newspapers spread out in serried array.

"That's quite a clear picture," said Morrison anxiously. "It's clearer than most. Even the subheads are distinct."

Craig pushed the print back. Morrison didn't look like a crank, but he assuredly sounded like one. Craig stood up.

"I thought you wanted financial advice," he said severely. "I'm sorry, but I'm not interested in newspapers or photographs either."

"You didn't look at the picture closely," protested Morrison. "And I do want financial advice. I'm willing to pay for it. Look!"

Craig glanced again. "Nothing but newspapers," he said impatiently, "What have they to do with financial advice?"

Morrison blinked at him. "Why," he said helplessly, "they're tomorrow's newspapers. And they haven't been printed yet. I thought advance information like this would be worth something in the stock market."

Craig looked again, and then stared. The thing was preposterous, was incredible! Here were pictures of all the morning papers of New York, recognizable and sedate. But they bore the date of September 2nd, while this was still the forenoon of the 1st. And yet their headlines were plausible and convincing except—well—the news they announced simply had not happened. Not yet.

Craig stared alarmedly at the plump little man opposite him.

"But—this is crazy!" he said sharply. "It's impossible!"

Morrison nodded in unhappy agreement.

"Yes," he admitted. "It is. That's why I don't know how to set about using it. It's inconceivable, but" he hesitated and said helplessly—"but it happens to be a fact."

Craig felt a surge of anger flowing over him. This plump, seemingly unwary little man was trying some crooked game on him. On him! Craig felt much inclined to boot Morrison out of the office. But it was a new game, at least. He moderated his intended tone.

"You took this picture?" he demanded.

"Oh, yes," said Morrison simply. "I brought a lot of them. I expected to have some trouble getting you to believe me."

"How'd you take it?"

"I have a sort of—contrivance," said Morrison almost apologetically. He added, "I'll tell you. Here's another picture, of the papers for day after tomorrow. Since it's so impossible, suppose I leave the pictures with you for a couple of days? Then, besides being impossible, they'll be proved facts."

He fumbled with his portfolio as if to rise.

Craig scowled at him. "Just what is your game?" he demanded. "What

do you expect to get out of me? Am I to understand you claim to have invented a"—he fumbled for the word, and said impatiently—"a time machine?"

Morrison blinked affirmatively. "I suppose you'd call it that. Yes. Of course, a man can't travel in time, but a machine can. Mine carries a camera and brings back pictures."

Craig opened his mouth to snarl. Then he smiled unpleasantly instead. He chose a cigar from a box on his desk, and pushed the box toward Morrison. Morrison's story hadn't the right touch, but he must be a clever crook to have faked those newspapers with their amazingly convincing headlines. It was ironic, though, that he had chosen Craig for his victim, when Craig was thinking of that window and the thirty story drop beyond it. Craig grinned mirthlessly.

"Have a cigar," he said with sardonic humor. "Tell me about it. You will get no money out of me, but I'll listen. If you can send a machine traveling in time, why not a man?"

Morrison blinked. "Because," he said painstakingly, "time is a dimension. It's—er—duration. And a man has—duration, or a lifetime, as well as a height and a breadth and a thickness. You know you couldn't shift part of his height—say to his head—up or down without moving all the rest of his height. If you tried it, you'd kill him. In the same way, you can't shift part of his duration, his lifetime, forward or back, without shifting all the rest. Else you'd kill him. I've tried it on a guinea pig. But you can shift a machine, and I've been sending an automatic camera ahead, as you see."

Craig grinned. "And how does this machine work?" he asked, still with ironic intent. "I suppose you'll need some fancy financing before you can demonstrate it to me?"

"No. I've got money enough to go on with," said Morrison simply. "But I want a lot more because I'm planning a bigger machine that will do things this one can't. So I want you to tell me how to make money out of the advance information I can get. I'm willing to pay you for doing it, besides the regular broker's commission."

Craig stared, and then he was abruptly bored with Morrison. He wasn't a crook, after all. He was just a crank, and Craig wanted to be rid of him.

"You come back tomorrow," he said in the tone of one at once humoring and dismissing an undesirable visitor. He would give orders, of course, that Morrison wasn't to be admitted again. "If this picture does check up, we'll talk further. But you realize that I can't act without proof."

Morrison obediently got up, gathered up his portfolio, and went to the door. He smiled a bit uncertainly and went out.

And Craig went abstractedly back to his meditations. The window had a great deal to do with Craig's thoughts. Delay in the payment of Baalinger's insurance hinted at many things, and all of them were unpleasant.

But it takes some courage even to look out of an opened window thirty stories high. Craig was rapidly growing desperate, but he had not yet the courage of desperation.

Perhaps that was why his mind, shying away from the window, came back to the two clear photographs on his desk. He looked at them again, and he did not believe a word of Morrison's story, but he found himself thinking, "If it were only true!" His problems would be solved then.

But he knew it could not not be true. Tomorrow's newspapers were not yet in type. Some of the events they would tell of had not yet even happened. Morrison might have guessed the next developments in one news-story, or even two, but the odds were thousands to one against his guessing in advance the headlines that would announce them. The odds would be millions to one against his actually forecasting the entire front page of even one newspaper. Against the half dozen or more the photograph pretended to foretell, the odds were millions of millions. They were trillions to one. They were so great as to have no meaning at all.

But Craig was desperate, and an insane sort of hope kept the thought in his head.

Next morning he did look at the newspapers.

And they checked!

In every item, in every detail, in every word and arrangement down to a quaintly blatant misprint in a sub-head on a financial news story, *the impossible had happened!* On September 1st, in the morning, Morrison had handed him a photograph of newspapers which would not even be printed until nearly twenty hours later.

When Morrison came to Craig's office that morning, Craig had not given orders to keep him out. On the contrary, he was waiting feverishly for him.

A great many things seemed to have come to a head all at once. Craig saw clearly that the delay in the payment of Ballinger's life insurance was not only inconvenient but suspicious, and not only suspicious but ominous.

Somebody had a definite idea that Ballinger's suicide had come just a little bit too opportunely for Craig. Somebody was investigating. Somebody was looking into this and that, trying to uncover a lead which would break down the official theory of suicide and lead to another conclusion altogether.

But if Craig had much money, to suspect him of murder would be absurd. And there was, in Morrison's machine, a promise of much money. His story itself was not credible. But neither was the existence of photographs of newspapers before they had even been set in type. Yet such a photograph had existed and still did exist. There was another in Craig's possession which showed newspapers yet another day in the future. Craig had reasoned thus, speciously, to fight himself into belief, because only if Morrison told the truth and could provide news of time yet to come—only then could Craig hope to avoid either the window or something less desirable.

He greeted Morrison with an almost hysterical warmth. Morrison had a parcel under his arm and explained uncertainly that he had brought his machine with him, being sure that Craig would be convinced. He unwrapped and displayed his contrivance, and it looked absurdly like an aquarium for tropical fish, save that it possessed a top, to which was fixed an electric light socket.

There were two levers and a dial and a metal bottom—mostly hidden by the camera inside—but nothing like machinery or motors. The nearest approach to a power system was two ordinary flashlight batteries behind the camera.

"I set this lever on the dial," said Morrison anxiously, "and press the other lever. The machine snaps ahead in time to the point the first lever is set for. It stops in that moment of the future. The camera shutter then clicks over, and in doing so actuates the return mechanism. Then the whole machine comes back to the exact instant it started from, so that—well—practically it's been there all the time. I'll show you."

He fished a bulky parcel from his pocket and took out a flash bulb such as photographers use nowadays instead of magnesium powder. It looked like an electric light, except that it contained a crumpled mass of metal foil. Morrison screwed it in the socket on top of the machine.

"I'm setting the dial for five minutes ahead," he explained apologetically. "When the camera shutter snaps, the flash bulb goes off. Then the machine comes back to its starting point in time, and we'll see that the bulb's been burnt, but we won't have seen the light. We'll see that when we pass through the instant in time where it goes off."

He pressed the starting lever. Apparently nothing whatever happened. The machine did not move; did not quiver. But suddenly the flash bulb was milky-streaked and burnt out, though no faintest ray of light had come from it.

"Now we'll wait five minutes," said Morrison, "and you'll see the light. I'm putting the machine on your desk, so the light will seem to come from empty air."

They waited five minutes. Then a vivid, searing, unbearably vivid flash appeared in empty space just where Morrison had held the machine when the bulb went black. There was a dark object visible under the flash for just the fraction of an instant. Knowing what to look for, Craig saw something that looked absurdly like an aquarium for tropical fish. It cast a rectangular shadow beneath the light. Then there was nothing visible at all.

Craig shook and trembled with his hopes. He led Morrison down to a taxicab, thirty stories below. In the taxicab he explained jerkily what he wanted Morrison to do. The taxicab stopped before the branch office of the *Financial Daily* on Nassau Street, and Craig got out and went inside. He stayed there for ten minutes. And in that ten minutes Morrison obediently put a plate and a flash bulb into his contrivance, set the dial as Craig had commanded, and pressed the starting lever. Instantly the bulb was burnt out. Morrison removed the plate and the spent bulb and inserted others.

He set the dial again, and again pressed the starting lever. He did that seven times in all, making a new dial setting for each performance.

If you insist on disbelief, of course you can point out that Morrison went through these particular antics on the 2nd of September, in a period of not more than ten minutes, and that the series of seven flashes that appeared at the same spot appeared on the nights from the 8th to the 15th of September,

inclusive. If you insist on disbelief, that is a complete answer to any suggestion that Morrison was responsible for the lights that annoyed patrolmen and squad cars down in the financial district. But if you insist on disbelief, you won't understand about the Morrison Monument.

CHAPTER II

A THOUSAND DOLLARS A WEEK

Morrison had been very obedient in the taxicab, and he continued to be obedient in the days that followed. Craig schemed feverishly and demanded photographs of most improbable objects, as they would look at most improbable times. Racing sheets—photographed as they would later be hung on newsstands beneath the Sixth Avenue Elevated—to tell him the results of horse races before they were run. Headlines in the more conservative journals to tell him of the two teams approaching the World's Series in baseball. Other headlines to tell him that the series would run a full seven games; and who would win the series; who would win each game; and the score inning by inning.

Craig inquired feverishly into the policy and number games of Harlem. He sent Morrison into dingy places to photograph—days in the future—the notices which would tell him the winning numbers before they won. And as the reams of plates yielded more advance information and his memoranda became systematized, Craig's hopes became fiercer and more desperately near to belief.

From the very beginning he laid out Morrison's money according to what the *Financial Daily* would say much later on. Then he waited in anguished impatience for the advance photographs to be verified like the first ones. But while waiting he found that he had known accurately events twenty-four hours ahead, then forty eight, then seventy two hours before they happened. He knew that Lucky Lady would win at Havre de Grace and what odds she would pay before she even went to the post. He knew that 792 would pay off in Honest Joe Griffin's number game in Harlem, long before Honest Joe knew it himself.

He knew that St. Louis would nose out the Giants for leadership of the National League while the rest of the world speculated feverishly. He knew in advance the result of the America's Cup races, down to the last protest flag. And these things, as days passed, turned out as he had anticipated them.

Down to the smallest items, the newspapers photographed by Morrison's time-camera even a week in the future were identical with printed copies when their presses finally spewed them forth. Races, numbers, stocks—the sequence of confirmations was irresistible.

Craig began to use his knowledge of the future on his own account. Through betting commissioners he wagered on the results at Detroit and in Kentucky. In person he put up stakes on such diverse items as the last

three figures in clearance house reports—and Honest Joe Griffin lost heavily on this; on the first football games of the season, and on the Hauptmann case developments. And he won.

Consistently, insistently, inevitably, he won! He realized that he was not gambling. He was investing, without risk, in his knowledge that a certain horse would infallibly win a certain race, that the clearing house figures were bound to be this and that to the last decimal, that the Giants would lose this game by an outfielder's error; and that the Cardinals would win because of a wild throw. He could not lose. He knew!

In three days he was ten thousand dollars ahead. In a week he was thirty. In two weeks he was a hundred thousand dollars winner, counting his pyramidings of Morrison's investments. In three weeks he began to fling money into the market and into every gamble he could find, in such quantities that the inevitable occurred. With a sensation of sheer incredulity he found that he had lost money on a rather shaky stock which should have wobbled, and instead had stood firm. Simultaneously he found that Ginger Jar, at Aqueduct, had paid him two to one instead of three.

Craig could understand both matters in terms of cause and effect. His heavy plunging would explain both. But he could not understand how Morrison's camera could be wrong. He went rather apprehensively to Morrison and found him crooning unmusically to himself as he worked with a file and hacksaw in the dingy place that was both home and laboratory to him.

Morrison was perfectly content. He had drawn several thousand dollars from Craig and was cutting out queerly shaped pieces of a metal that looked like silver. He could take more pictures whenever Craig demanded them, of course, but right now he was building his new machine. It looked even more than the first one like an aquarium for tropical fish, but it was considerably larger.

"Look here!" said Craig accusingly. "There's something wrong with your machine! It's given me wrong information."

Morrison blinked at him.

"I don't see how that could be," he said unhappily. "What's happened?"

Craig told him. A stock that should have wobbled had not. A horse had paid smaller odds than a time-photograph announced. He showed Morrison the photograph of the *Racing News*, with a printed copy for comparison.

The discrepancy was plain. Morrison blinked disturbedly. He thought.

"I see!" he said satisfiedly. "It's perfectly clear! It explains some results that have puzzled me, too."

"What?" demanded Craig.

"Why, the future isn't fixed," said Morrison pleasedly. "It couldn't really be, of course. That would mean no free will, and it wouldn't be sound philosophy. I took two pictures of New York in the year 2400 once, from the same spot and with the same dial setting, and they didn't agree. Now I see why. One was slightly out of line."

"But I'm talking about these pictures here and now!" said Craig impa-

tiently. "Your theories don't matter for five hundred years from now! But if the machine is going to be unreliable—"

"You're interfering with its working," explained Morrison. "You see, we're all moving forward in time toward the future as a man in an elevator is moving upward in space toward the roof. The time camera goes ahead and comes back with reports, as a man might throw a camera up ahead of his elevator and pull it back to him with a string. But you've been doing things because of the time camera reports."

"You've been gambling for me. It's like making the elevator crowd closer to one side of the shaft. If you put enough power on the job, you could probably make an elevator break through the side of its shaft and start off in a new direction altogether. If you do enough things because of your advance information, you'll change our direction through time so we'll arrive at a new future altogether!"

He beamed at his own solution.

Then he added seriously, "Come to think of it, I see that I'm planning to change the future for the whole human race."

Craig scowled to himself. He was not interested in Morrison's plans, and this explanation didn't make much sense. But he did see how he could meet this new requirement for caution. Gamble in smaller sums. Skim the cream from the markets; not try to milk it dry.

"Mr. Craig," said Morrison suddenly, "how much money have you made for me?"

"Quite a lot," said Craig.

"As much as five thousand?" asked Morrison hopefully. "I need some more money to finish this machine, and of course I want to give you a decent commission. I might do with three thousand, but the materials are expensive. I have to have some rubidium, you know."

Craig's lip twisted. He'd already used twenty thousand dollars of Morrison's winnings to make himself secure against any revival of that matter of Ballinger's suicide. He had succeeded, of course. All suspicion was officially ended, and he was just really beginning to make money. In two months his winnings would have mounted to a dizzying figure. In a year . . . He'd expected to pocket a good bit more than Morrison would ever know about, but Morrison's asking hopefully if he'd made as much as three thousand was humorous. It proved what a fool Morrison was.

Craig laughed internally. "Why, I can take three thousand out of your working capital," he said in private scorn, "but you'd better try to do with two."

Morrison nodded, but his face was wistful.

"Why the devil do you want a bigger machine?" demanded Craig. "I'm making a lot for you with this one. Plenty, it seems to me!"

He waited in contemptuous amusement for Morrison to agree that the six or seven thousand dollars he would get was a handsome reward for solving the secret of time. But Morrison said eagerly:

"This machine will have a longer range. It will go ten thousand years ahead. I can pack books and phonograph records in it! I can send a notation-

picture projector and camera in it. I'll be able to open communication with the men of the future. You see? I'll give them historical information they'll want, in exchange for technical information we'll want. They may have cracked the atom in ten thousand years! They may have rocket-ships! There's no end to the knowledge they could give us, if we can make contact with them."

"And what'll you get out of it?" asked Craig skeptically.

Morrison blinked.

"Why—why—" he said hesitantly, "I'll be remembered as the first man who ever solved the secret of time. I've my data all whipped into shape for publication, but if I can add communications from the men of the future, contributing to our technical knowledge . . ."

"You mean," said Craig incredulously, "you'll publish that sort of information? You'll throw away your secret? Ruin your chance to—"

"I'm going to publish, of course," said Morrison in surprise. "Why, it's really important. I'm proud of it. I don't say I'll get a Nobel prize, but—"

Craig stared at him. He felt a savage scorn of the man who did not see how many millions of dollars he could make by the one aquarium like device that was already completed. Because, of course, if Morrison published an account of his discovery, he would make it valueless.

Other men would build other machines—probably better ones than Morrison's. There would be so many machines bringing back news from the future that the future would be changed by men plunging on their advance information. Foreknowledge would cease to have any value because too many people would have it. The supply of exact prediction would equal the demand, and if everybody knew the future they would change it so that nobody would know it!

As a business man, Craig saw the utter stupidity of advancing science at the cost of the secret of the time-camera.

"But look here!" said Craig explosively. "You want money, don't you?"

Morrison blinked at him again. "Of course."

"I'll make more of it for you," said Craig urgently. "Lots more! But don't give away your secret! So far, I've only been using your money to trade with"—this was a lie—"and you've been drawing the profits as fast as I've made them for you." That was another lie. "But I know your machine works. You let me make up a syndicate to use it, keep the existence of the machine a secret, and I'll guarantee you an income of fifty thousand dollars a year for the rest of your life!"

"But—not publish?" protested Morrison. "I'd be throwing away all my work. I couldn't do that—"

"You fool, you'd be rich!" snapped Craig. "Fifty thousand a year is a thousand dollars a week. You'd be a rich man!"

But Morrison shook his head helplessly. A thousand dollars a week was a purely imaginative quantity to him. Without experience of the things money can buy, he did not envision those things as desirable. He was not tempted, because the temptation had no meaning. He was interested in his experimentings, not in spending money.

"I couldn't do that," he said painfully. "This is a matter of science. If I can bridge ten thousand years of scientific learning—"

Craig felt rage sweep over him. Morrison meant this! And Craig had made over a hundred thousand dollars in a little more than a month, with time wasted at the beginning because of his own skepticism. He'd foreseen riches incredible; and Morrison would throw it away!

"Look here!" he snapped again, struggling to keep his rage within bounds. "How big does a million dollars look to you? I'll give you ten thousand dollars tomorrow for a six months option on the machine, and in six months I'll buy it for a million dollars."

But Morrison blinked at him in that silly way he had. "You don't understand," he said helplessly. "I didn't make the time camera to see how rich I could get. I'd like to have money, of course, but—"

He could not explain his attitude. He simply was not tempted by money because he wanted something else. Therefore he refused money, just as a man who wanted only money would refuse any other substitute. Morrison was mild and even apologetic, but Craig realized that an unshakable obstinacy would make all efforts at persuasion useless.

"You said," Morrison said stubbornly a little later, "that you have two thousand dollars that I'm entitled to. With that much I believe I can finish up the work I want to do. So we'll just call our business dealings at an end. I'm tired of taking pictures for you, anyway. It isn't interesting. I don't learn anything!"

Then Craig lost his temper. He had reason, of course, because Morrison was withdrawing from a partnership in which Craig had made a hundred thousand dollars in a month, and was withdrawing for what seemed the most foolish, most idiotic of reasons to Craig. He tried to argue, but Morrison wouldn't argue. He tried to persuade, and Morrison grew suspicious. Then Craig snarled at him. He cursed him for a fool who didn't know what he was throwing away. And then—Craig was very foolish indeed—he threatened Morrison. Because Morrison wasn't interested in making him rich.

The instant after that threat he knew he'd make a mistake. Morrison looked at him very queerly. He seemed to have come to some new, private decision.

"We'll call our business dealings at an end," repeated Morrison. "There's something—strange somewhere . . ."

There was. The Morrison Monument. In the future.

CHAPTER III

A HORRIBLE SATISFACTION

Back in his own office, Craig cursed himself savagely for an hour. His rage against Morrison dissolved in a greater rage at his own ineptitude. He should have known that Morrison, being a fool, would be a crank, to

boot. He couldn't think of anything but that obsession of his about science. He—Craig—hadn't gone about it properly. He should have bought that small machine, paying five, ten, twenty thousand for it. He should have cashed in on the foreknowledge it would bring him while Morrison puttered with his new and larger machine. And for a certain reasonable payment, it might have been possible to arrange an accident . . .

Then Craig realized that he was thinking of murder again. First Ballinger, to stave off certain disaster, and now he was thinking of Morrison. He thrust the idea feverishly from his mind. He'd gone through enough, waiting for Ballinger's insurance to be paid to the firm. He didn't need that now, though it still hadn't been paid. But he wouldn't risk such a thing again with Morrison. Oh, no! He still had reams of photographs, going forward a good two weeks into the future. He'd make what he could before Morrison finished his new machine and turned all the future into chaos by his revelations . . .

Then Craig suddenly remembered that Morrison could not finish the new machine. He needed money for expensive metals. Rubidium. He needed at least two thousand dollars, and he couldn't get it without coming to Craig!

Craig became again expensively and contentedly aware of his surroundings. His own office, luxuriously comfortable, and the windows which looked out on a myriad of roofs with little plumes of steam rising from some of them and the oblong specks which were cars crawling along the streets some thirty stories below.

He leaned back in his chair and smiled in triumph. Morrison couldn't finish his machine without money, and nobody would give him money but Craig! He couldn't sue for it, because if he explained why Craig owed him, he'd convict himself at once of insanity. He couldn't do anything but accept Craig's terms! And Craig would demand the little time camera, and he would find out what it was that Morrison needed to buy, and he would use money with some lavishness to delay if not to prevent the completion of the big machine. Rubidium, for instance, being so rare, it might be possible to corner the supply . . . And Morrison would toil and fret while Craig used the little machine to take more and ever more advantage of his foreknowledge of the future.

There was just one flaw in Craig's plan. It was that Morrison did not try to collect that two thousand dollars. He did not appear at all. One day. Two. Three. A week. Two weeks. . . . He sent no message asking payment. He did not appear himself. And Craig was working furiously during those two weeks. A liner burned off the New Jersey coast. Shipping stocks dropped. Craig made money. Horsemen shipped their thoroughbreds from Detroit and Aqueduct and Lexington and to Laurel. Craig made more money. Two fanatics shot down a Balkan king and the foreign minister of a European republic. Foreign bonds trembled and munitions stocks went unobtrusively a point or two higher. Craig made more money . . .

And then his information from the future ran out. The photographs Morrison had made for him were accurate to the last least detail, but as the

days passed their accuracy was proven—and then they were merely news and not miracles any longer. A day later they were no more than history, which is of course even less important than news.

Craig was a rich man, now. He had over a half million in winnings from that queer little device like an aquarium for tropical fish. But that device was no longer working for him. His photographs of newspapers showed dates that were entirely reasonable. They were past dates. His memoranda of events to take place and facts to be reckoned with were now all canceled by the passage of time. From a man grown desperate, Craig was a man grown rich. But Morrison was no longer taking pictures for him, and he had not even asked for the money Craig had contemptuously told him was his.

Craig stood it a little less than one day. Gambling gets in a man's blood, even when he alternately wins and loses. Craig had won uninterruptedly for a good deal more than a month. He would have been more than human had he been willing to stop.

He went to see Morrison, taking money with him. He was prepared to wheedle, bribe, cajole, argue, or even to plead. He was prepared to make the most magnificent of offers, the most extravagant of concessions. He arrived at Morrison's not overly impressive residence just after dusk. And Morrison answered his knock and opened the door, and then at sight of him turned deathly pale and tried to slam the door shut again. Craig forced a smile, though when he saw Morrison's stupidly serious face his hatred boiled up anew.

"I brought your money," he said cordially. "I waited for you to send for it, but you didn't. Here it is. More than you expected. Four thousand."

"You—you can keep it," panted Morrison. He seemed to have shriveled at sight of Craig. "I don't want to talk to you. I don't want to see you. I want you to go away!"

Craig forced his way persuasively through the door and into Morrison's combined living room and laboratory. He saw the new machine. It was three feet or more in width, and four feet high, and nearly six feet long. It looked exactly like an aquarium save for its plate glass top. One end opened like a door, though, so things could be put in and taken out again. The smaller machine lay neglected on a table.

Morrison stared at Craig, chalky-white. Perhaps he already knew all about the Morrison Monument, but it is doubtful. He did know something, however. He looked like a scared, plump, rabbit.

"Here!" said Craig, smiling, though his nerves were taut. "Take your money, man! I see that I was wrong. I came to apologize. I've a proposition to make that you can change about as you please! There are millions in it, and it will subsidize all the scientific research you like, and you'll be just as famous as you please! I see I was wrong. I'd—I'd like to do something for science myself!"

Morrison made a little bubbling noise, his face still chalky. Craig's placatory manner, the thick sheaf of green backs he held out, his most persuasive intonation, had had no effect at all. Morrison looked at Craig as if he were

paralyzed. His throat worked convulsively. He seemed not to have heard a word of Craig's speech. And hot rage lashed at Craig again. The stupidity of Morrison infuriated him. He hated the plump little man who could have given him millions, but wanted to throw it all away instead.

"The—the future isn't fixed," said Morrison desperately. "Please go away, Mr. Craig! Please! I—I know something you don't. I'll agree to anything if only you'll never come anywhere near me again!"

It was Craig's turn to stare. Morrison's mouth was dry. His face was utterly bloodless. He looked as if Craig were a cobra poised to strike.

"What the devil's the matter?" demanded Craig. A little bit of fear nagged at him. After all, Morrison could see into the future. He thrust that fear aside. "What the devil's the matter?" he demanded again. "You've got your new machine finished, I see. Have you tried it yet?"

Morrison spoke through stiff lips. "Y yes. It works. I've sent it ten thousand years ahead in time, and brought it back."

But his voice was hoarse and terror-stricken. He seemed to be trying to placate an enemy he had no hope of placating. Craig raged internally because Morrison was so thoroughly a fool. But he could not lose this chance of coming to an agreement. He tried to be friendly, to persuade Morrison to drop his fears.

"It's a big one!" said Craig admiringly. Even to himself, his admiration rang false. "You won't just send this off and snap it back in a hurry! You said you were going to try to open communication with the men of the future. You'll let it stay in the future a bit, won't you, so they can open it and read the messages you send them?"

Again Morrison answered hoarsely.

"Y yes. It will stay in the future a week and then come back."

"But how do you arrange that? Hello, here's a clock! That sets off the return mechanism?"

"Y yes." Morrison suddenly said desperately. "You've got to go away, Mr. Craig! The future isn't fixed! It can't be! But if you stay here, you—you'll murder me like you murdered somebody named Ballinger!"

Craig felt exactly as if the universe had cracked open about him. He was safe. He was bound to be safe! Nobody in the world now even suspected that Ballinger was anything but a suicide—but Morrison knew!

"What's that?" demanded Craig thickly. "What's that you say?"

"Go away!" begged Morrison abjectly. "The future isn't fixed! You changed it once. You can change it again. You don't have to kill me! Just go away and stay away!"

"But Ballinger!" snarled Craig. "Who told you I killed him? How did you know that? Tell me, or I'll—"

Morrison wrung his hands. He was a very grotesque figure just then, in the untidy little room in which he had solved the mystery of time. The glittering, shining device which fulfilled the dreams of men was the only object in the room which was not grubby, was not repulsive to Craig's fastidious taste. Morrison was grotesque.

"You—didn't pay me my money," said Morrison desperately, "so I—"

decided to gamble myself, with photographs from ahead in time. And the newspapers—"

"Go on!" snarled Craig.

"You'd killed Ballinger the same as you'd killed me," sobbed Morrison. "Go away! You can change the future! Go away! If you don't, I'll send a machine back to take a picture of you killing this Ballinger! I'll—prove you a murderer if you don't—"

Then Craig's rage burst all bounds. He hated Morrison for a fool. He despised him for his abjectness. Now for the plump and grubby little fool to threaten him! Something snapped in Craig's brain. His hands closed on Morrison's throat. With rage heating at him, with something of horrible satisfaction, he strangled Morrison. The little man clawed helplessly at his fingers, and then made funny jerking motions with his arms and legs, and then sagged, and then was a dead weight in Craig's hands.

Craig flung him furiously to the floor. "Fool!" he snarled. "You—you fool!"

Morrison did not answer. He would never answer anybody again. And quite suddenly Craig knew what he was going to do. It was quite simple. The future could be changed. He had done it once, and Morrison had planned to change it himself, by scientific knowledge gained from men ten thousand years ahead in time. And here was the machine Morrison had made. It was quite big enough for Craig's purpose.

He made sure the little time-camera was at hand for him to carry away. Then he opened the door of the big machine and set methodically to work. Morrison had known that Craig was going to kill him. His terror, then, was understandable, as were his pleas for Craig to go away. If Craig had understood, he'd have gone, but now he knew how to change the future anyhow. This machine was designed to travel far ahead of its own epoch, pause in some future period of time, and then come back when a time-clock inside it reversed its controls.

Craig smashed that time-clock. He put Morrison into the machine. He looked unspeakably grotesque. One more thing. He searched for late plates that Morrison might have exposed. He found them and tossed them into the machine glancing over them for date lines. He found one plate with a date-line of the future. He read it as well as he could make out the headlined words in the reversed lights and shades of a negative. His hands shook. Then he smashed it, swearing. He flung that inside, too. And then he hunted for any memoranda which might reveal what sort of machine Morrison had been working on. He found notebooks and flung them in on top of Morrison's body. He found a sheaf of carefully written description, which was plainly a technical account of the machine and its workings, written by Morrison for publication in some technical magazine. Craig flung that into the time machine with vengeful satisfaction as the last act in cleaning up the laboratory.

He checked and re-checked his every move. He was moving swiftly, but his brain was perfectly, infinitely cool. Morrison was out of the way. The time-camera was his. And he had only to close the door of the machine

and send it into the future for the future to be changed so Morrison's silly prophecy plate would be made wrong.

Because there is a rule of law referred to as the rule of *corpus delicti*, no man may be convicted of murder when there is no proof of a death. There can be no proof of a death when there is no corpse nor any man who has seen a corpse. With the flip of a lever Craig would send Morrison, and all accounts of Morrison's discovery, ten thousand years into the future. There could be no evidence against him. He would have the little time camera to make him rich. Forever, now, his every investment would be safe, and his every gamble would be investment, and his every guess would be infallible.

He set the dial on the big machine to the point Morrison's scrawled handwriting indicated as "*Maximum Distance*." He pressed the starting lever. And the machine quivered for the fraction of a second.

But that was all! It did not vibrate. Craig swore wrathfully. He tried to press the lever again. It did not move. Indeed, it did not even flex to the pressure of his fingers. It was as immovable as if it had been cast in place. More so. It was as immovable as a mountain!

Craig put his hand on the dial. He tried to twist that, to give the hidden machinery a jerk that would set it in motion. But the dial would not move either. His whole strength had no effect.

Cold sweat came out on Craig's face. He tried to jar the machine, as one would jar a slot machine which failed to function. And the machine felt as if he had tried to jar a cliff. He tried to open the door. It would not yield. More, though the catch on top of it was of the simplest, he could not even stir that. Then he saw that the edge of a sheet of manuscript stuck out through the crack of the closed door. He thought perhaps that paper jammed some machinery. He pulled at the paper to free the door. He could not move, or stir, or tear, or even bend the bit of paper!

It was monstrous. It was incredible. It was like some horrible dream where one fights desperately against intangibles which are just tangible enough to crush one. He could not start the machine. He could not open it. He could not even move it! And the machine was of glass, and in it was the body of Morrison, patently strangled . . .

In ten minutes Craig was half hysterical. Somehow, the resistance of that scrap of paper frightened him as much as anything else. He tore at it. He tugged at it. In the end he took pliers from Morrison's work bench to seize it. Nothing affected the paper which a little while since had rustled in his hands as he flung it contemptuously into the time machine. Then the glass scared him. If he could smash the glass and take Morrison's body away and hide it . . .

But he could not break the glass. He kicked it. He attacked it with a hammer. Presently he took Morrison's heavy vise and battered desperately at it. And the glass remained unmarred.

At the end of half an hour, Craig was nearly a madman. He had taken a section of steel piping and tried to pry the time machine over, so he could attack it from the bottom. The machine with Morrison in it could not weigh

more than two hundred and fifty or three hundred pounds. But the heavy pipe bent in Craig's hands and the time machine was still undisturbed.

Superstitious terror beset him. This thing was monstrous! It was impossible. Even a thing too heavy to be moved will give. It will at least scratch and scar from effects made to move it! But the time machine was completely unmarked. It was immovable. It was invulnerable.

Craig found himself trying to scratch it with the diamond set in his ring. The diamond slid smoothly over the plate glass. It did not catch even in the metal corners. Craig tried it, desperately, upon the paper. *He could not even scratch the paper!*

Then horror seized upon him, and a maniacal hatred. He beat at the glass with his fists. He attacked it like a madman. He had locked in this monstrous thing the clear proof of his guilt as a murderer, and he could not send it away. He could not even take it out again. He could not even tear that scrap of paper . . .

Then Craig saw what was written on the scrap of paper. It was part of a sheet containing Morrison's description of his machine. Most of it was inside the machine, but could be read through the door. Craig read it:

. . . but an exchange of physical objects with the men of the future is impractical. If a time machine is sent from here, today, to the beyond of tomorrow, it must pass through every intervening instant it would remain in all those intervening moments, and we would see it when we passed through those moments. To us it would be immovable and indestructible. If I have a time machine on a table, and it is there tomorrow, then no matter what I do with it today, tomorrow it is on that table. If it is on that table in the future, if only one five-hundredth of a second in the future then no matter what I do to it now, it will return, it will exist, it will be in that same spot when that one five-hundredth of a second has passed. It is there!

Craig read that and cursed it. Even to him it meant the hopelessness of all his efforts. Whatever he did to the time machine, it would be again as it had been, only a fraction of a second later. But he could not believe it. He would not believe it. There was one thing he had not tried. It was the only thing left. He had read somewhere that an ordinary building fire will make a temperature that will melt iron, if it gets a good enough start. Craig struck matches. He gave it that start.

The fire, really, seemed to start on every floor of the building at once. Firemen could do nothing but save the adjoining buildings. And when the smoking ruins of the house in which Morrison had lived at last collapsed with a rumble and thunder and monstrous spouting of sparks, Craig was in the crowd that watched. He was, undoubtedly, the first to see the cause of the Morrison Monument. It was a glass box with metal corners which looked rather like an overgrown aquarium for tropical fish. It hung in mid air, unsupported by any material object. It was not injured by the fire because it was already in existence in the future, and so could not be destroyed in the

present. It could not fall because it was already, in the future, at that distance above the ground. It was unharmed ten thousand years ahead, and hence it was, and is, and will be unharmed in all the intervening instants of time. If by some inconceivable force it should be blasted out of existence in today, nevertheless it exists in tomorrow, and when we reach tomorrow we will see it again . . .

Craig was the first to see the queer sight. He looked like a dead man, then. He remembered dully that he had forgotten to bring away the time machine, which not being sent into the future could be melted in the present. It was melted, somewhere in the ashes of the building. Craig realized that when the ashes would allow it, firemen would put ladders up and examine the strange object in mid air. They would see Morrison in there, strangled. In the course of time they would come to Craig . . .

Craig went back to his office. He went up the thirty stories in the elevator which—because it was late, now—was the only one running in the building. He sat down at his desk and wrote.

When he went to the window and raised it, and then removed the slanting sheet of glass which keeps a blast of wind from blowing in when one wants only ventilation, he was still chalky-white. He had something of the look of a sleep walker. The last instant before he leaned out, he realized that the confession he had just written would precisely account for and precisely cause just the headlines in tomorrow's newspapers that Morrison's time-camera had photographed. But then he looked downward.

And everything happened as he expected. The vertigo that comes of height did make falling easy.

That's what really happened. You probably remember a good bit of this story, anyhow. You may recall the final decision by a group of eminent scientists, that Morrison was self-deceived. He did not achieve a machine which traveled in time. What he achieved—the scientists say—was a machine which achieved a condition of relativistic stasis, a condition of absolute immobility with regard to surrounding objects. You can believe that if you like. Anyhow the scientists couldn't open the machine, and they couldn't move it, and there's a scaffolding with a planked up box on top of it where Morrison's flat used to be in an apartment house long since burned down. A tarpaulin inside the box further hides the machine and Morrison and all his notes.

Nobody will build a building with the time machine perforce enclosed within its walls. There is absolutely nothing that can be done except to build a monument around it, which will be much in the way of a widening of Amsterdam Avenue somewhere around 1957. It will undoubtedly come up as a nuisance, too, in the equivalent of the New York Board of Aldermen about the end of the twentieth century, and in the twenty third and even the thirtieth and perhaps the fortieth centuries there will be tales about it.

But you see why the Monument will be built. It isn't even planned yet, but it will be. It must be, if only to protect the tender nuds of children from

the shock they are able to get by climbing thirty feet up on open scaffolding, pushing out a loose plank on the northeast corner of the planked-in top, and climbing in the hole thus uncovered to lift up the tarpaulin. But besides the plain necessity for the Monument—Morrison really earned one.

The Incubator Man

by Wallace West

The span of man is three score years and ten. That's seventy years, and truth be known few men reach even that legitimate age goal. So we blame the failures on worry and work, on the frenzy and drive of human life. That's doubtful, because animals in the wild have much more worry on a far more dangerous hour-to-hour basis—and manage to live a life span several times the length of their infancy-to-maturity span. If man lived as comparatively long, he should live at least five times the twenty year period of his maturity—that is to a hundred and twenty. Something is wrong somewhere. Is it physical? Is it disease? And food? Wallace West poses this question. . . .

"The best and ultimate test of the ability of man to live long beyond his present allotted score of years would be to have a man, from his babyhood on, live in what practically would be a sterilized test tube. He would breathe sterilized air. He would eat sterilized food. He would drink sterilized liquids. He would thus be placed as far as humanly possible beyond the range of the myriad microbes that in many ways are the enemies of man and that bring about many of his ailments. Such a man, growing and living under special conditions, might live to be 260."

—Sir Ronald Ross

SIR RONALD ROSS, great scientist though you were, and dead though you have been these hundred and twenty five years, I lay a curse upon you for those words.

I, Columbus Norton, the Incubator Man, am that creature Sir Ronald foretold, and I have lived a life of blackest hell that humanity might view me dispassionately through the gigantic glass test tube wherein I have existed for one hundred and fifty years, and learn how to increase the length of life of the worthless race thereby.

My father, Dr. Philip Norton, lived in what was then Newark, New Jersey, and enjoyed a nation wide reputation as a specialist in germ diseases. He loved germs. He dreamed of germs. His whole life was filled with germ culture and the new and strange diseases he had discovered or had learned to check. In fact, he had almost ceased to be human.

Then, in 1927 A. D., as time was reckoned in those days, he read an interview which Sir Ronald Ross, discoverer of the malaria microbe, had given to a newspaper reporter in what must have been an unguarded moment. This interview suggested to my father the idea of growing a man under glass, so to speak—I am the result!

The idea of growing a man in an absolutely healthful environment fastened upon the mind of my father like one of the diseases whose master he was. It made him give up all his other work so that he might devote his

time to that one plan. It made him send me, his as yet unborn son, into the most pitiful slavery man has ever suffered.

I have read how it all was done. Dr. Norton constructed an air tight glass chamber approximately three hundred feet square and twenty feet high. He equipped it with heating and cooling devices of the latest type, and fitted it with gymnastic apparatus, comfortable lodgings, a magnificent library and a swimming pool.

The glass used was of the then new type which permitted the passage of ultra violet rays. By the use of temperature regulating devices an ideal outdoor climate of exactly even temperature was assured, winter and summer. He installed filtration plants for the air and water to be used, and an air tight chamber by which food and other necessary articles could be passed into the enclosure without the slightest danger of any germ life entering with it.

When I was born, I was whisked immediately into this prison. While I was an infant a white clad nurse cared for me. She wore rubber gloves and a respirator so that her touch could not contaminate me nor her breath mingle with mine.

I have often wondered what sort of woman my mother must have been to allow her son to be snatched from her so easily. According to the books I have read (which, by the way, have given me almost my only knowledge of the outside world), mother love is not expressed so. Perhaps she also had given her life to science, or did not realize what she had done. I never found out. She died before I learned to talk.

During my childhood the imprisonment wasn't so bad. I knew nothing else. As I became able to care for myself, the nurse withdrew. After that I had contact with the outer world only through loud-speaking telephones which my father had installed and through the books and cinema films slipped through the fumigation chamber into my cell.

The best teachers were procured for me; the best of books and apparatus provided. The most perfect care was taken of my health. Living under such ideal conditions, I progressed in my studies with amazing rapidity, soon outstripping my teachers. At the age of twelve I passed the Harvard University entrance examinations, and in my sixteenth year was granted a Ph. D. degree. Yes, Dr. Norton had cause to be proud of his experiment.

I remember him well - a man with a stern, handsome face, who sat outside my cage, day after day, taking endless notes and talking pleasantly with me, yet watching my every reaction as though I were a guinea pig.

He induced me to study medicine, and I made rapid progress, until we ran into the difficulty that live animal tissues could not be introduced into the chamber for fear of bringing disease germs with them. So, to this day, my knowledge of medical science is purely academic.

Oh, don't think I never rebelled! I did, bitterly, but my sense of duty, which had been fostered by my father in his many talks with me, conquered my rebellion. Dr. Norton continually pointed out the great service I was doing to humanity - that through me and through him the world was learning to control itself, and to live sanely and keep healthy and live long.

The only time I ever saw my father angry was when, in a fit of boyish

rage, I threatened to smash the glass and escape. His face turned white as marble. He stood, trembling with passion, hands clenched above his head, like some prophet of old about to hurl imprecations upon sinners.

"Boy," he thundered, "you hold the future of humanity in that club which you have in your hands. Mankind must live longer to become wise enough to conquer his environment. Shatter that glass, and man's future collapses into the dust with it. Aye, and if there is a hell, your soul will be consigned to the deepest pit."

What could a mere child do against the force of such a personality? I crept away trembling and never after that dared oppose his wishes.

His prophecy soon proved itself correct. The human race entered a new cycle as the result of dietary truths which I exemplified. Dr. Norton proved that a purely vegetable diet was more healthful for the human animal; that certain combinations of foods were poisonous while others were beneficial; that toxic substances in the blood will kill a man as surely as strychnine, that under right conditions of living, human machinery is little subject to breakage or deterioration—in short, during the first thirty years of my life, preventive medicine was advanced to such an extent that the average expectancy of human life jumped from 55.3 to 68 years.

One thing my father had not counted upon was the fact that I would become a man, with a man's dreams of love and fair women. And by the time I reached maturity there was no help for the matter. He regretted again and again that he had not also placed a girl baby in the chamber.

It was too late for that by the time he realized the desirability of such an experiment. I believe I hastened the day of his death by refusing to allow him to place a newly born girl in the chamber, even then, so that she might grow to maturity under the same ideal conditions, and perhaps, years later, become my mate. He must have been a soulless monster, even to think of such a scheme—and yet—and yet I loved him and while he lived did not greatly mind my confinement.

I slept eight hours daily, studied eight hours and played eight hours. The best books, cinemas and apparatus were provided for my research work. By the time I was fifty I can unhesitatingly say that I knew more than any one man in the world.

I was well developed physically also, in spite of the restricted space in which I lived, for my father had always impressed upon me the fact that a healthy body makes a healthy mind. I know that I must have been, even then, a splendid specimen of manhood, for I could not help but hear, through my loud speakers, the comments of the people who by this time were flocking from the ends of the earth to see me.

It was a strange thing to see my father and the other members of his establishment growing old, while I remained at the peak of my vitality. It has become a common thing to me since then, but the knowledge that death was stalking those outside, while I escaped unscathed, was at the time inexpressibly sad.

My father died when I was near fifty years old. With my consent he willed his laboratories and my glass cubicle to the government, with the under-

standing that I was to be carefully guarded and tended. His last words to me were, "Carry on, boy. Some day, through you, this silly thing that I am about to do won't be necessary."

With his passing my last real contact with the outside world was broken. I never could grow attached to the vapid guards and caretakers who took his place, or the obsequious officials who periodically came to refresh their shallow minds with my learning and advice.

For this reason the thing I am about to do no longer seems wrong to me. I have spent my life in the service of humanity. Men live longer and are, perhaps, somewhat wiser, but I often wonder, now, whether the sacrifice was worth while. At least, in a few hours I shall know whether the world is worth saving. My only wonder is that I have waited thus long.

But to return to my story. As the years passed I confined myself more and more to my studies, and ignored the crowds that gathered outside the walls of my cage to look and admire. I can truthfully say that my scientific treatises, written here, have been the wonder of the world. It was I who first explained the true time and space equation, and showed that Einstein, handicapped as he was by lack of equipment and the faulty work of his predecessors, had only had glimpsed the truth in his theory that space is subject to curvature. But enough of such nonsense.

It was when I was seventy-three years old, in the year 2000 A. D., or the year One, Free Time, that the Ruskinite rebellion broke out in the United Americas. There must have been some atavistic streak in me, for I sympathized heartily with those poor, benighted Ruskinites who dreamed of a breakdown of the gigantic monster of Science that mankind, like a Frankenstein, is building up about him, and who tried to smash it and return to the simple agricultural life of their forefathers.

Of course the outbreak was doomed to failure from the start, though streets of the country ran blood for a few bitter weeks. The very science which they hated subdued them. How could disciples of Ruskin stoop to heat rays, poison gases and atomic bombs? They perished fighting to the last, but I know that for weeks government troops guarded my chamber as though it were a precious jewel. Sad would have been my lot, I am sure, could the Ruskinites have captured my cubicle. I know that I, who was at heart their best friend, was hated by them as the heart and soul of the scientific system.

I will skip over the next seventy-five years of my life with but a few words. Strange—three quarters of a century—time enough for most men to live a full life and die content. For me they passed in a dreary succession, enlightened only by my studies and my dreams. As I look back, I conceive myself as a being almost in a state of hibernation, waiting for the vital spark which would awaken me.

In me metabolism and catabolism seemed exactly balanced. After my thirty-fifth year, I grew no older physically. I never was sick. I was amply confirming that prediction of Sir Ronald, made so long ago. My only regret was that my father could not have lived to appreciate his triumph—a triumph which had turned dust in my mouth ages ago, and which seemed

no more remarkable than those silly experiments by which early Twentieth Century doctors were able to keep chicken hearts alive indefinitely in a sterile medium.

I devoted myself to study as before, until I conceived that I had in my one head the whole sum of human knowledge. I gave out that knowledge to the world until it drew so far ahead of present understanding that scientists could no longer comprehend it. Oh, I tell you! With so much to do, man dawdles by the way like a lazy schoolboy. Well, soon now they must begin working out their own salvation.

And now I draw near the end of my story. As I said, I had conceived that on my one hundred and fiftieth birthday I held in my brain the sum of human knowledge, together with much that was beyond the comprehension of any but myself. Savants from all the world consulted me regarding knotty problems of science and government. I might add, also, that the present expectancy of life is eighty years.

Yet how little we know, poor things that humans are! My complacency lies in ruins about me. A whole new set of complexes and speculations has been released within me. Three days ago, while resting on the lawn outside my quarters, I was struck by something totally outside my experience. As I lay there a shadow fell on the grass and I looked up at a girl who stood not ten feet away from me on the other side of the glass barrier.

"Good morning," I said inanely, knowing that the telephones would make me perfectly audible outside the enclosure.

She nodded slightly and continued to look at me with wide, luminous eyes, in which there was, I somehow felt, an infinite sadness.

She was a beautiful thing—beautiful with the glory which perfect health and well being give to our modern girls. Her eyes were dark and soft, with that slightly oblong slant which is giving more and more of an Oriental appearance to the people of America.

Her body was a thing to dream of as it was revealed by the short kilt and embroidered band across the breasts, which is the fashion of today. Her feet, in little, gold tipped sandals, were high arched and sentient. Her hair was the color of gold taken from Inca mines—but I perceive I grow ridiculous.

"Did you wish to consult me?" I asked foolishly, growing uncomfortable under that steady gaze.

Again she shook her head, but added, in a voice that tinkled silver music: "Why should I wish to consult you?"

And strangely, I could think of no reply. What could I tell that radiant being that she did not already know?

"Your name?" I ventured.

"Why," she answered, as though surprized that it could be of the slightest interest to me, "I'm Lilith Hughes, 3684."

"Of the National Theater," I exclaimed, interpreting the last two figures. "Of course you would be."

She smiled faintly. "Thank you." A pause followed. "I must be going," she said at last. Performance in San Francisco, you know."

And then I said a strange thing. The words seemed to form themselves

without my volition. "Can't you stay and talk with me a little longer?" I pleaded. "It's lonely here."

Again she smiled that slow, enchanting smile of hers. "Can't. I'm sorry. The Torpedo doesn't wait, you know. And then you have your work to do." Her voice sank to the faintest murmur, which she did not realize I could hear plainly through the amplifiers. "You have your work to do—poor thing!"

When I looked up, she was gone.

The hell of one hundred and fifty years of loneliness has been nothing to the hell of the last three days!

Last night I made up my mind to leave all this. Humanity must take care of itself. To be perfectly frank: to hell with humanity; I want out of this.

I am a man, sound and strong and well favored. I look and feel and think like one of thirty five and I—am in love. Strange that such a primal urge, which I had considered merely a trick of nature's to prolong the race, should sweep me away at last!

I am going to seal this statement of my case in an envelope, so that if anything happens to me in this strange world I am about to explore, people will understand why I have done this. Tonight I'll smash this cursed glass and go in search of Lilith. Pretty name—Lilith.

The foregoing manuscript, carefully typed and sealed, was found on the body of Columbus Norton, the Incubator Man, who died of an almost unknown disease—the measles—two days after he broke out of his sealed chamber.

Attendants at B. Hospital, where he was taken, say that because of his long stay in an absolutely germless atmosphere he had failed to develop any resistance to disease and was 100 per cent susceptible to the first microbe which found lodgment in his body. He died a very few hours after being brought to the hospital.

Evidently he had spent his time, until the disease struck him, in becoming acquainted with a world whose ways he knew only by hearsay. At least there is no evidence that he ever took the San Francisco Torpedo, as the manuscript implies was his purpose.

The Dark Side of Antri

by Sewell Peaslee Wright

The problems of interstellar travel may prove to be minor beside the problems of social understanding with the dwellers of other worlds. We have read many stories by recent writers glorifying Galactic Empires. None of these stories show much comprehension of the infinite problems of such contacts, of the painstaking and painful meeting of minds that must take place, soberly and intelligently, not brashly and brazenly. In a long-ago pioneer series of stories of contact between the starry worlds S. P. Wright examined many of the great events that could someday be actuality in a star-hopping future. In this story we sense an effort to understand even that which may seem to us to be villainy. We learn that men may become martyrs voluntarily for the cause of peace between worlds even as between peoples.

AN OFFICER of the special Patrol Service dropped in to see me the other day. He was a young fellow, very sure of himself, and very kindly towards an old man.

He was doing a monograph, he said, for his own amusement, upon the early forms of our present offensive and defensive weapons. Could I tell him about the first Deuber spheres and the earlier disintegrator rays and the crude atomic bombs we used back when I first entered the Service?

I could, of course. And I did. But a man's memory does not improve in the course of a century of Earth years. Our scientists have not been able to keep a man's brain as fresh as his body, despite all their vaunted progress. There is a lot these deep thinkers, in their great laboratories, don't know. The whole universe gives them the credit for what's been done, yet the men of action who carried out the ideas—but I'm getting away from my pert young officer.

He listened to me with interest and toleration. Now and then he helped me out, when my memory failed me on some little detail. He seemed to have a very fair theoretical knowledge of the subject.

"It seems impossible," he commented, when we had gone over the ground he had outlined, "that the Service could have done its work with such crude and undeveloped weapons, does it not?" He smiled in a superior sort of way, as though to imply we had probably done the best we could, under the circumstances.

I suppose I should not have permitted his attitude to irritate me, but I am an old man, and my life has not been an easy one.

"Youngster," I said—like many old people, I prefer spoken conversation—"back in those days the Service was handicapped in every way. We lacked weapons, we lacked instruments, we lacked popular support, and backing. But we had men, in those days, who did their work with the tools that were at hand. And we did it well."

"Yes, sir!" the youngster said hastily—after all, a retired commander in the Special Patrol Service does rate a certain amount of respect, even from these perky youngsters—"I know that, sir. It was the efforts of men like yourself who gave us the proud traditions we have to-day."

"Well, that's hardly true," I corrected him. "I'm not quite so old as that. We had a fine set of traditions when I entered the Service, son. But we did our share to carry them on, I'll grant you that."

"'Nothing Less than Complete Success,'" quoted the lad almost reverently, giving the ancient motto of our service. "That is a fine tradition for a body of men to aspire to, sir."

"True. True." The ring in the boy's voice brought memories flocking. It was a proud motto; as old as I am, the words bring a thrill even now, a thrill comparable only with that which comes from seeing old Earth swell up out of the darkness of space after days of outer emptiness. Old Earth, with her wispy white clouds and her broad seas—Oh, I know I'm provincial, but that is another thing that must be forgiven an old man.

"I imagine, sir," said the young officer, "that you could tell many a strange story of the Service, and the sacrifices men have made to keep that motto the proud boast it is to-day."

"Yes," I told him. "I could do that. I have done so. That is my occupation, now that I have been retired from active service. I—"

"You are a historian?" he broke in eagerly.

I forgave him the interruption. I can still remember my own rather impetuous youth.

"Do I look like a historian?" I think I smiled as I asked him the question, and held out my hands to him. Big brown hands they are, hardened with work, stained and drawn from old acid burns, and the bite of blue electric fire. In my day we worked with crude tools indeed; tools that left their mark upon the workman.

"No. But—"

I waved the explanation aside.

"Historians deal with facts, with accomplishments, with dates and places and the names of great men. I write—what little I do write—of men and high adventures, so that in this time of softness and easy living some few who may read my scribblings may live with me those days when the worlds of the universe were strange to each other, and there were many new things to be found and marveled at."

"And I'll venture, sir, that you find much enjoyment in the work," commented the youngster with a degree of perception with which I had not credited him.

"True. As I write, forgotten faces peer at me through the mists of the years, and strong, friendly voices call to me from out of the past. . . ."

"It must be wonderful to live the old adventures through again," said the young officer hastily. Youth is always afraid of sentiment in old people. Why this should be, I do not know. But it is so.

The lad—I wish I had made a note of his name; I predict a future for him in the Service—left me alone, then, with the thoughts he had stirred up in my mind.

Old faces . . . old voices. Old scenes, too

Strange worlds, strange peoples. A hundred, a thousand different tongues. Men that came only to my knee, and men that towered ten feet above my head. Creatures—possessed of all the attributes of men except physical form—that belonged only in the nightmare realms of sleep.

An old man's most treasured possessions: his memories. A face drew close out of the flocking recollections; the face of a man I had known and loved more than a brother so many years—dear God, how many years—ago.

Anderson Croy. Search all the voluminous records of the bearded historians, and you will not find his name. No great figure of history was this friend of mine; just an obscure officer on an obscure ship of the Special Patrol Service.

And yet there is a people who owe to him their very existence.

I wonder if they have forgotten him? It would not surprise me.

The memory of the universe is not a reliable thing.

Anderson Croy was, like most of the officer personnel of the Special Patrol Service, a native of Earth.

They had tried to make a stoop shouldered dabbler in formulas out of him, but he was not the stuff from which good scientists are moulded. He was young, when I first knew him, and strong; he had mild blue eyes and a quick smile. And he had a fine, steely courage that a man could love.

I was in command, then, of the *Ertak*, my second ship. I inherited Anderson Croy with the ship, and I liked him from the first time I laid eyes upon him.

As I recall it, we worked together on the *Ertak* for nearly two years, Earth time. We went through some tight places together. I remember our experience, shortly after I took over the *Ertak*, on the monstrous planet Callor, whose tiny, gentle people were attacked by strange, vapid Things that come down upon them from the fastness of the polar cap, and . . .

But I wander from the story I wish to tell here. An old man's mind is a weak and weary thing that totters and weaves from side to side; like a worn out ship, it is hard to keep on a straight course.

We were out on one of those long, monotonous patrols, skirting the outer boundaries of the known universe, that were, at that time, before the building of all the many stations we have to-day a dreaded part of the Special Patrol Service routine.

Not once had we landed to stretch our legs. Slowing up to atmospheric speed took time, and we were on a schedule that allowed for no waste of even minutes. We approached the various worlds only close enough to

report, and to receive an assurance that all was well. A dog's life, but part of the game.

My log showed nearly a hundred "All's well" reports, as I remember it, when we slid up to Antri, which was, so far as size is concerned, one of our smallest ports of call.

Antri, I might add, for the benefit of those who have forgotten their maps of the universe, is a satellite of A 411, which, in turn, is one of the largest bodies of the universe, and both uninhabited and uninhabitable. Antri is somewhat larger than the moon, Earth's satellite, and considerably farther from its controlling body.

"Report our presence, Mr. Croy," I ordered wearily. "And please ask Mr. Correy to keep a sharp watch on the attraction meter." These huge bodies such as A-411 are not pleasant companions at space speeds. A few minute's trouble—space ships gave trouble, in those days—and you melted like a drop of solder when you struck the atmospheric belt.

"Yes, sir!" There never was a crisper young officer than Croy.

I bent over my tables, working out our position and charting our course for the next period. In a few seconds Croy was back, his blue eyes gleaming.

"Sir, an emergency is reported on Antri. We are to make all possible speed to Oreo, their governing city. I gather that it is very important."

"Very well, Mr. Croy." I can't say the news was unwelcome. Monotony kills young men. "Have the disintegrator ray generators inspected and tested. Turn out the watch below in such time that we may have all hands on duty when we arrive. If there is an emergency, we shall be prepared for it. I shall be with Mr. Correy in the navigating room; if there are any further communications, relay them to me there."

I hurried up to the navigating room, and gave Correy his orders. "Do not reduce speed until it is absolutely necessary," I concluded. "We have an emergency call from Antri, and minutes may be important. How long do you make it to Oreo?"

"About an hour to the atmosphere; say an hour more to set down in the city. I believe that's about right, sir."

I nodded, frowning at the twin charts, with their softly glowing lights, and turned to the television disc, picking up Antri without difficulty.

Of course, back in those days we had the huge and cumbersome discs, their faces shielded by a hood, that would be suitable only for museum pieces now. But they did their work very well, and I searched Antri carefully, at varying ranges, for any sign of disturbances. I found none.

The dark portion, of course, I could not penetrate. Antri has one portion of its face that is turned forever from its sun, and one half that is bathed in perpetual light. The long twilight zone was uninhabited, for the people of Antri are a sun loving race, and their cities and villages appeared only in the bright areas of perpetual sunlight.

Just as we reduced to atmospheric speed, Croy sent up a message.

"The Governing Council sends word that we are to set down on the platform atop the Hall of Government, the large, square white building in the center of the city. They say we will have no difficulty in locating it."

I thanked him and ordered him to stand by for further messages, if any, and picked up the far flung city of Oreo in my television disc.

There was no mistaking the building Croy had mentioned. It stood out from the city around it, cool and white, its mighty columns glistening like crystal in the sun. I could even make out the landing platform, slightly elevated above the roof on spidery arches of silvery metal.

We sped straight for the city at just a fraction of space speed, but the hand of the surface temperature gauge crept slowly toward the red line that marked the dangerous incandescent point. I saw that Correy, like the good navigating officer he was, was watching the gauge as closely as myself, and hence said nothing. We both knew that the Antrians would not have sent a call for help to a ship of the Special Patrol Service if there had not been a real emergency.

Correy had made a good guess in saying that it would take about an hour, after entering the gaseous envelope of Antri, to reach our destination. It was just a few minutes—Earth time, of course—less than that when we settled gently onto the landing platform.

A group of six or seven Antrians, dignified old men, wearing the short, loosely belted white robes that we found were their universal costume, were waiting for us at the exit of the *Ertak*, whose sleek, smooth sides were glowing dull red.

"You have hastened, and that is well, sirs," said the spokesman of the committee. "You find Antri in dire need." He spoke in the universal language, and spoke it softly and perfectly. "But you will pardon me for greeting you with that which is, of necessity, uppermost in my mind, and in the minds of these, my companions.

"Permit me to welcome you to Antri, and to introduce those who extend those greetings." Rapidly, he ran through a list of names, and each of the men bowed gravely in acknowledgment of our greetings. I have never observed a more courteous nor a more courtly people than the Antrians; their manners are as beautiful as their faces.

Last of all, their spokesman introduced himself. Bori Tulher, he was called, and he had the honor of being master of the Council—the chief executive of Antri.

When the introductions had been complete, the committee led our little party to a small, cylindrical elevator which dropped us, swiftly and silently, on a cushion of air, to the street level of the great building. Across a wide, gleaming corridor our conductors led us, and stood aside before a massive portal through which ten men might have walked abreast.

We found ourselves in a great chamber with a vaulted ceiling of bright, gleaming metal. At the far end of the room was an elevated rostrum, flanked on either side by huge, intricate masses of statuary of some creamy, translucent stone that glowed as with some inner light. Semicircular rows of seats, each with its carved desk, surmounted by numerous electrical controls, occupied all the floor space. None of the seats was occupied.

"We have excused the Council from our preliminary deliberations," explained Bori Tulher, "because such a large body is unwieldy. My compan-

ions and myself represent the executive heads of the various departments of the Council, and we are empowered to act." He led us through the great council chamber, and into an anteroom, beautifully decorated, and furnished with exceedingly comfortable chairs.

"Be seated, sirs," the Master of the Council suggested. We obeyed silently, and Bort Tulber stood before, gazing thoughtfully into space.

"I do not know just where to begin," he said slowly. "You men in uniform know, I presume, but little of this world of ours. I presume I had best begin far back.

"Since you are navigators of space, undoubtedly you are acquainted with the fact that Antri is a world divided into two parts; one of perpetual night, and the other of perpetual day, due to the fact that Antri revolves but once upon its axis during the course of its circuit of its sun, thus presenting always the same face to our luminary.

"We have no day and night, such as obtain on other spheres. There are no set hours for working nor for sleeping nor for pleasure. The measure of a man's work is the measure of his ambition, or his strength, or his desire. It is so also with his sleep and with his pleasures. It is—it has been—a very pleasant arrangement.

"Ours is a fertile country, and our people live very long and very happily with little effort. We have believed that ours was the nearest of all the worlds to the ideal, that nothing could disturb the peace and happiness of our people. We were mistaken.

"There is a dark side to Antri. A side upon which the sun never has shone. A dismal place of gloom, which is like the night upon other worlds.

"No Antrian has, to our knowledge, ever penetrated this part of Antri, and lived to tell of his experience. We do not even till the land close to the twilight zone. Why should we, when we have so much fine land upon which the sun shines bright and fair always, save for the two brief seasons of rain?

"We have never given thought to what might be on the dark face of Antri. Darkness and night are things unknown to us; we know of them only from the knowledge which has come to us from other worlds. And now—now we have been brought face to face with a terrible danger which comes to us from that other side of this sphere.

"A people have grown there. A terrible people that I shall not try to describe to you. They threaten us with slavery, with extinction. Four ara ago (the Antrians have their own system of reckoning time, just as we have on Earth, instead of using the universal system, based upon the enaro. An ara corresponds to about fifty hours, Earth time.) we did not know that such a people existed. Now their shadow is upon all our beautifully sunny country, and unless you can aid us, before other help can reach us, I am convinced that Antri is doomed!"

For a moment not one of us spoke. We sat there, staring at the old man who had just ceased speaking.

Only a man ripened and seasoned with the passing years could have stood there before us and uttered, so quietly and solemnly, words such as had just

come from his lips. Only in his eyes could we catch a glimpse of the torment which gripped his soul.

"Sir," I said, and have never felt younger than at that moment, when I tried to frame some assurance to this splendid old man who had turned to me and my youthful crew for succor, "we shall do what it lies within our power to do. But tell us more of this danger which threatens.

"I am no man of science, and yet I cannot see how men could live in a land never reached by the sun. There would be no heat, no vegetation. Is that not so?"

"Would that it were!" replied the Master of the Council, bitterly. "What you say would be indeed the truth, were it not for the great river and seas of our sunny Antri, which bear their heated waters to this dark portion of our world, and make it habitable.

"And as for this danger, there is little to be said. At some time, men of our country, men who fish, or venture upon the water in commerce, have been borne, all unwillingly, across the shadowy twilight zone and into the land of darkness. They did not come back, but they were found there and disposed of their menores.

"Somehow, these creatures who dwell in darkness determined the use of the menore, and now that they have resolved that they shall rule all this sphere, they have been able to make their threat clear to us. Perhaps"—and Bori Tulber smiled faintly and terribly—"you would like to have that message direct from its bearer?"

"Is that possible, sir?" I asked eagerly, glancing around the room. "How—"

"Come with me," said the Master of the Council gently. "Alone—for too many near him excites this terrible messenger. You have your menore?"

"No. I had not thought there would be need of it." The menores of those days, it should be remembered, were heavy, cumbersome circlets that were worn upon the head like a sort of crown, and one did not go so equipped unless in real need of the device. Today, of course, your menores are but jeweled trinkets that convey thought a score of times more effectively and weigh but a tenth as much.

"It is a lack easily remedied." Bori Tulber excused himself with a little bow and hurried out into the great council chamber, to appear again in a moment with a menore in either hand.

"Now, if your companions and mine will excuse us for a moment . . ." He smiled around the seated group apologetically. There was a murmur of ascent, and the old man opened a door in the other side of the room.

"It is not far," he said. "I will go first, and show you the way."

He led me quickly down a long, narrow corridor to a pair of steep stairs that circled far down into the very foundation of the building. The walls of the corridor and the stairs were without windows, but were as bright as noonday from the ethon tubes which were set into both ceiling and walls.

Silently we circled our way down the spiral stairs, and silently the Master of the Council paused before a door at the bottom—a door of dull red metal.

"This is the keeping place of those who come before the Council charged

with wrong doing," explained Bori Tulber. His fingers rested upon and pressed certain of a ring of small white buttons in the face of the door, and it opened swiftly and noiselessly. We entered, and the door closed behind us with a soft thud.

"Behold one of those who live in the darkness," said the Master of the Council grimly. "Do not put on the menore until you have a grip upon yourself. I would not have him know how greatly he disturbs us."

I nodded, dumbly, holding the heavy menore dangling in my hand.

I have said that I have beheld strange worlds and strange people in my life, and it is true that I have. I have seen the headless people of that red world Iralo, the ant people, the dragon fly people, the terrible carnivorous trees of L-472, and the pointed heads of a people who live upon a world which may not be named. But I have still to see a more terrible creature than that which lay before me now.

He—or it—was reclining upon the floor, for the reason that he could not have stood. No room save one with a vaulted ceiling such as the great council chamber, could offer room enough for this creature to walk erect.

He was, roughly, a shade better than twice my height, yet I believe he would have weighed but little more. You have seen rank weeds that have grown up in the darkness to reach the sun; if you can imagine a man who had done likewise, you can, perhaps, picture that which I saw before me.

His legs at the thigh were no larger than my arm, and his arms were but half the size of my wrist, and jointed twice instead of but once. He wore a careless garment of some dirty yellow, shaggy hide, and his skin, revealed on feet and arms and face, was a terrible, bloodless white; the dead white of a fish's belly. Maggot white. The white of something that had never known the sun.

The head was small and round, with features that were a caricature of man's. His ears were huge, and had the power of movement, for they cocked forward as we entered the room. The nose was not prominently arched, but the nostrils were wide, and very thin, as was his mouth, which was faintly tinged with dusky blue, instead of healthy red. At one time his eyes had been nearly round, and, in proportion, very large. Now they were but shadowy pockets, mercifully covered by shrunken, wrinkled lids that twitched but did not lift.

He moved as we entered, and from a reclining position, propped up on the double elbows of one spidery arm, he changed to a sitting position that brought his head nearly to the ceiling. He smiled sickeningly, and a queer, sibilant whispering came from the bluish lips.

"That is his way of talking," explained Bori Tulber. "His eyes, you will note, have been gouged out. They cannot stand the light; they prepared their messenger carefully for his work, you'll see."

He placed his menore upon his head, and motioned me to do likewise. The creature searched the floor with one white, leathery hand, and finally located his menore, which he adjusted clumsily.

"You will have to be very attentive," explained my companion. "He expresses himself in terms of pictures only, of course, and his is not a highly

developed mind. I shall try to get him to go over the entire story for us again, if I can make him understand. Emanate nothing yourself; he is easily confused."

I nodded silently, my eyes fixed with a sort of fascination upon the creature from the darkness, and waited.

Back on the *Entak* again, I called all my officers together for a conference.

"Gentlemen," I said, "we are confronted with a problem of such gravity that I doubt my ability to describe it clearly.

"Briefly, this civilized, beautiful portion of Antri is menaced by a terrible fate. In the dark portion of this unhappy world there live a people who have the lust of conquest in their hearts—and the means at hand with which to wreck this world of perpetual sunlight.

"I have the ultimatum of this people direct from their messenger. They want a terrible tribute in the form of slaves. These slaves would have to live in perpetual darkness, and wait upon the whims of the most monstrous beings these eyes of mine have ever seen. And the number of slaves demanded would, as nearly as I could gather, mean about a third of the entire population. Further tribute in the form of sufficient food to support these slaves is also demanded."

"But in God's name, sir," burst forth Croy, his eyes blazing, "by what means do they propose to enforce their infamous demands?"

By the power of darkness—and a terrible catyclysm. Their wise men—and it would seem that some of them are not unversed in science—have discovered a way to unbalance this world, so that they can cause darkness to creep over this land that has never known it. And as darkness advances, these people of the sun will be utterly helpless before a race that loves darkness, and can see in it like cats. That, gentlemen, is that fate which confronts this world of Antri!"

There was a ghastly silence for a moment, and then Croy, always impetuous, spoke up again.

"How do they propose to do this thing, sir?" he asked hoarsely.

"With devilish simplicity. They have a great canal dug nearly to the great polar cap of ice. Should they complete it, the hot waters of the seas will be liberated upon this vast ice field, and the warm waters will melt it quickly. If you have not forgotten your lessons, gentlemen, you will remember, since most of you are of Earth, that our scientists tell us our own world turned over in much this same fashion, from natural means, and established for itself new poles. Is that not true?"

Grave, almost frightened nods travelled around the little semicircle of white, thoughtful faces.

"And is there nothing, sir, that we can do?" asked Kincaide, my second officer, in an awed whisper.

"That is the purpose of this conclave: to determine what may be done. We have our bombs and our rays, it is true, but what is the power of this one ship against the people of half a world? And such a people!" I shuddered, despite myself, at the memory of that grinning creature in the cell far below the floor of the council chamber. "This city, and its thousands, we

might save, it is true—but not the whole half of this world. And that is the task the Council and its Master have set before us.”

“Would it be possible to frighten them?” asked Croy. “I gather that they are not an advanced race. Perhaps a show of power—the rays—the atomic pistol—bombs— Call it strategy, sir, or just plain bluff. It seems the only chance.”

“You have heard the suggestion, gentlemen,” I said. “Has anyone a better?”

“How does Mr. Croy plan to frighten these people of the darkness?” asked Kincaide, who was always practical.

“By going to their country, in this ship, and then letting events take their course,” replied Croy promptly. “Details will have to be settled on the spot, as I see it.”

“I believe Mr. Croy is right,” I decided. “The messenger of these people must be returned to his own kind; the sooner the better. He has given me a mental map of his country; I believe that it will be possible for me to locate the principal city, in which his ruler lives. We will take him there, and then—may God aid us, gentlemen.”

“Amen,” nodded Croy, and the echo of the word ran from lip to lip like the prayer it was. “When do we start?”

I hesitated for just an instant.

“Now,” I brought forth crisply. “Immediately. We are gambling with the fate of a world, a fine and happy people. Let us throw the dice quickly, for the strain of waiting will not help us. Is that as you would wish it, gentlemen?”

“It is, sir!” came the grave chorus.

“Very well. Mr. Croy, please report with a detail of ten men, to Bori Tulber, and tell him of our decision. Bring the messenger back with you. The rest of you, gentlemen, to your stations. Make any preparations you may think advisable. Be sure that every available exterior light is in readiness. Let me be notified the moment the messenger is on board and we are ready to take off. Thank you, gentlemen!”

I hastened to my quarters and brought the *Estak's* log down to the minute, explaining in detail the course of action we had decided upon, and the reasons for it. I knew, as did all the *Estak's* officers who had saluted so crisply, and so coolly gone about the business of carrying out my orders, that we would return from our trip to the dark side of Antri triumphant or—not at all.

Even in these soft days, men still respect the stern, proud motto of our service: “Nothing Less Than Complete Success.” The Special Patrol does what it is ordered to do, or no man returns to present excuses. That is a tradition to bring tears of pride to the eyes of even an old man, in whose hands there is strength only for the wielding of a pen. And I was young, in those days.

It was perhaps a quarter of an hour when word came from the navigating room that the messenger was aboard, and we were ready to depart. I closed the log, wondering, I remember, if I would ever make another entry therein,

and, if not, whether the words I had just inscribed would ever see the light of day. The love of life is strong in men so young. Then I hurried to the navigating room and took charge.

Bori Tuber had furnished me with large scale maps of the daylight portion of Antri. From the information conveyed to me by the messenger of the people of darkness—the Chisee they called the natives, as nearly as I could get the sound—I rapidly sketched in the map of the other side of Antri, locating their principal city with a small black circle.

Realizing that the location of the city we sought was only approximate, we did not bother to work out exact bearings. We set the *Ertak* on her course at a height of only a few thousand feet, and set out at low atmospheric speed, anxiously watching for the dim line of shadow that marked the twilight zone, and the beginning of what promised to be the last mission of the *Ertak* and every man she carried within her smooth, gleaming body.

"Twilight zone in view, sir," reported Croy at length.

"Thank you, Mr. Croy. Have all the exterior lights and searchlights turned on. Speed and course as at present, for the time being."

I picked up the twilight zone without difficulty in the television disc, and at full power examined the terrain.

The rich crops that fairly burst from the earth of the sunlit portion of Antri were not to be observed here. The Antrians made no effort to till this ground, and I doubt that it would have been profitable to do so, even had they wished to come so close to the darkness they hated.

The ground seemed dank, and great dark slugs moved heavily upon its greasy surface. Here and there strange pale growths grew in patches—twisted, spotted growths that seemed somehow unhealthy and poisonous.

I searched the country ahead, pressing further and further into the line of darkness that was swiftly approaching. As the light of the sun faded, our monstrous searchlights cut into the gloom ahead, their great beams slashing the shadows.

In the dark country I had expected to find little if any vegetable growth. Instead, I found that it was a veritable jungle through which even our searchlight rays could not pass.

How tall the growths of this jungle might be, I could not tell, yet I had the feeling that they were tall indeed. They were not trees, these pale, weedy arms that reached towards the dark sky. They were soft and pulpy, and without leaves; just long naked sickly arms that divided and subdivided and ended in little smooth stumps like amputated limbs.

That there was some kind of activity within the shelter of this weird jungle, was evident enough, for I could catch glimpses now and then of moving things. But what they might be, even the searching eye of the television disc could not determine.

One of our searchlight beams, waving through the darkness like the curious antenna of some monstrous insect, came to rest upon a spot far ahead. I followed the beam with the disc, and bent closer, to make sure my eyes did not deceive me.

I was looking at a vast cleared place in the pulpy jungle—a cleared space in the center of which there was a city.

A city built of black, sweating stone, each house exactly like every other house, tall, thin slices of stone, without windows, chimneys or ornamentation of any kind. The only break in the walls was the slit-like door of each house. Instead of being arranged along streets crossing each other at right angles, these houses were built in concentric circles broken only by four narrow streets that ran from the open space in the center of the city to the four points of the compass. Around the entire city was an exceedingly high wall, built of and buttressed with the black, sweating stone of which the houses were constructed.

That it was a densely populated city there was ample evidence. People—they were creatures like the messenger; that the Chisee are a people, despite their terrible shape, is hardly debatable—were running up and down the four radial streets, and around the curved connecting streets, in the wildest confusion, their double-elbowed arms flung across their eyes. But even as I watched, the crowd thinned and melted swiftly away, until the streets of the queer, circular city were utterly deserted.

"The city ahead is not the one we are seeking, sir?" asked Croy, who had evidently been observing the scene through one of the smaller television discs. "I take it that governing city will be further in the interior."

"According to my rather sketchy information, yes," I replied. "However, keep all the searchlight operators busy, going over every bit of the country within the reach of their beams. You have men on all the auxiliary television discs?"

"Yes, sir."

"Good. Any findings of interest should be reported to me instantly. And—Mr. Croy!"

"Yes, sir?"

"You might order, if you will, that rations be served all men at their posts." Over such country as this, I felt it would be wise to have every man ready for an emergency. It was, perhaps, as well that I issued this order.

It was perhaps half an hour after we had passed the circular city when, far ahead, I could see the pale, unhealthy forest thinning out. A half dozen of our searchlight beams played upon the denuded area, and as I brought the television disc to bear I saw that we were approaching a vast swamp, in which little pools of black water reflected the dazzling light of our searching beams.

Nor was this all. Out of the swamp a thousand strange, winged things were rising; yellowish, bat-like things with forked tails and fierce hooked beaks. And like some obscene miasma from that swamp, they rose and came straight for the *Ertak*!

Instantly I pressed the attention signal that warned every man on the ship.

"All disintegrator rays in action at once!" I barked into the transmitter. "Broad beams, and full energy. Bird-like creatures, dead ahead; do not cease action until ordered!"

I heard the disintegrator ray generators deepen their notes before I finished speaking, and I smiled grimly, turning to Correy.

"Slow down as quickly and as much as possible, Mr. Correy," I ordered. "We have work to do ahead."

He nodded, and gave the order to the operating room; I felt the forward surge that told me my order was being obeyed, and turned my attention again to the television disc.

The ray operators were doing their work well. The searchlights showed the air streaked with fine siftings of greasy dust, and these strange winged creatures were disappearing by the scores as the disintegrator rays beat and played upon them.

But they came on gamely, fiercely. Where there had been thousands, there were but hundreds . . . scores . . . dozens. . . .

There were only five left. Three of them disappeared at once, but the two remaining came on unhesitatingly, their dirty yellow bat-like wings flapping heavily, their naked heads out stretched, and hooked beaks snapping.

One of them disappeared in a little sifting of greasy dust, and the same ray dissolved one wing of the remaining creature. He turned over suddenly, the one good wing flapping wildly, and tumbled towards the waiting swamp that had spawned him. Then, as the ray eagerly followed him, the last of that hellish brood disappeared.

"Circle slowly, Mr. Correy," I ordered. I wanted to make sure there were none of these terrible creatures left. I felt that nothing so terrible should be left alive—even in a world of darkness.

Through the television disc I searched the swamp. As I had half suspected, the filthy ooze held the young of this race of things: grub-like creatures that flipped their heavy bodies about in the slime, alarmed by the light which searched them out.

"All disintegrator rays on the swamp," I ordered. "Sweep it from margin to margin. Let nothing be left alive there."

I had a well trained crew. The disintegrator rays massed themselves into a marching wall of death, and swept up and down the swamp as a plough turns its furrows.

It was easy to trace their passage, for behind them the swamp disappeared, leaving in its stead row after row of broad, dusty paths. When we had finished there was no swamp: there was only a naked area upon which nothing lived, and upon which, for many years, nothing would grow.

"Good work," I commended the disintegrator ray men. "Cease action." And then, to Correy, "Put her on her course again, please."

An hour went by. We passed several more of the strange, damp circular cities, differing from the first we had seen only in the matter of size. Another hour passed, and I became anxious. If we were on our proper course, and I had understood the Chinese messenger correctly, we should be very close to the governing city. We should —

The waving beam of one of the searchlights came suddenly to rest. Three or four other beams followed it — and then all the others.

"Large city to port, sir!" called Croy excitedly.

"Thank you. I believe it is our destination. Cut all searchlights except the forward beam, Mr. Correy!"

"Yes, sir."

"You can take her over visually now, I believe. The forward searchlight beam will keep our destination in view for you. Set her down cautiously in the center of the city in any suitable place. And—remain at the controls ready for any orders, and have the operating room crew do likewise."

"Yes, sir," said Correy crisply.

With a tenseness I could not control, I bent over the hooded television disc and studied the mighty governing city of the Chisee.

The governing city of the Chisee was not unlike the others we had seen, save that it was very much larger, and had eight spoke-like wheels radiating from its center, instead of four. The protective wall was both thicker and higher.

There was another difference. Instead of a great open space in the center of the city, there was a central, park-like space, in the middle of which was a massive pile, circular in shape, and built, like all the rest of the city, of the black, sweating rock which seemed to be the sole building material of the Chisee.

We set the *Ertak* down close to the big circular building, which we guessed—and correctly—to be the seat of government. I ordered the searchlight ray to be extinguished the moment we landed, and the ethon tubes that illuminated our ship inside to be turned off, so that we might accustom our eyes as much as possible to darkness, finding our way about with small ethon tube flashlights.

With a small guard, I stood at the forward exit of the *Ertak* and watched the huge circular door back out on its mighty threads, and finally swing to one side on its massive gimbals. Croy—the only officer with me—and I both wore our menores, and carried full expeditionary equipment, as did the guard.

The Chisee messenger, grimacing and talking excitedly in his sibilant, whispering voice, crouched on all fours (he could not stand in that small space) and waited, three men of the guard on either side of him. I placed his menore on his head and gave him simple, forceful orders, picturing them for him as best I could.

"Go from this place and find others of your kind. Tell them that we would speak to them with things such as you have upon your head. Run swiftly!"

"I will run," he conveyed to me, "to those great ones who sent me." He pictured them fleetingly. They were creatures like himself, save that they were elaborately dressed in fine skins of several pale colors, and wore upon their arms, between their two elbows, broad circlets of carved metal which I took to be emblems of power or authority, since the chief of them all wore a very broad band. Their faces were much more intelligent than their messenger had led me to expect, and their eyes, very large and round, and not at all human, were the eyes of thoughtful, reasoning creatures.

Doubled on all fours, the Chisee crept through the circular exit, and

straightened up. As he did so, from out of the darkness a score or more of his fellows rushed up, gathering around him, and blocking the exit with their reedy legs. We could hear them talking excitedly in high pitched, squeaky whispers. Then, suddenly I received an expression from the Chusee who wore the menore:

"Those who are with me have come from those in power. They say one of you, and one only, is to come with us to our big men who will learn, through a thing such as I wear upon my head, that which you wish to say to them. You are to come quickly; at once."

"I will come," I replied. "Have those with you make way—"

A heavy hand fell upon my shoulder; a voice spoke eagerly in my ear:

"Sir, you must not go!" It was Croy, and his voice shook with feeling. "You are in command of the *Ertak*; she, and those in her need you. Let me go! I insist, sir!"

I turned in the darkness, quickly and angrily.

"Mr Croy," I said swiftly, "do you realize that you are speaking to your commanding officer?"

I felt his grip tighten on my arm as the reproof struck home.

"Yes, sir," he said doggedly. "I do. But I repeat that your duty commands you to remain here."

"The duty of a commander in this Service leads him to the place of greatest danger, Mr. Croy," I informed him.

"Then stay with your ship, sir!" he pleaded, craftily. "This may be some trick to get you away, so that they may attack us. Please! Can't you see that I am right, sir?"

I thought swiftly. The earnestness of the youngster had touched me. Beneath the formality and the "sirs" there was a real affection between us.

In the darkness I reached for his hand; I found it and shook it solemnly—a gesture of Earth which it is hard to explain. It means many things.

"Go, then, Andy," I said softly. "But do not stay long. An hour at the longest. If you are not back in that length of time, we'll come after you, and whatever else may happen, you can be sure that you will be well avenged. The *Ertak* has not lost her stinger."

"Thank you, John," he replied. "Remember that I shall wear my menore. If I adjust it to full power, and you do likewise, and stand without the shelter of the *Ertak*'s metal hull, I shall be able to communicate with you, should there be any danger." He pressed my hand again, and strode through the exit out into the darkness, which was lit only by a few distant stars.

The long, slim legs closed in around him; like a pigmy guarded by the skeletons of giants he was led quickly away.

The minutes dragged by. There was a nervous tension on the ship, the like of which I have experienced not more than a dozen times in all my years.

No one spoke aloud. Now and again one man would mutter uneasily to another; there would be a swift, muttered response, and silence again. We were waiting—waiting.

Ten minutes went by. Twenty. Thirty.

Impatiently I paced up and down before the exit, the guards at their posts, ready to obey any orders instantly.

Forty five minutes. I walked through the exit; stepped out onto the cold, hard earth.

I could see, behind me, the shadowy bulk of the *Ertak*. Before me, a black, shapeless blot against the star sprinkled sky, was the great administrative building of the Chisee. And in there, somewhere, was Anderson Croy. I glanced down at the luminous dial of my watch. Fifty minutes. In ten minutes more—

"John Hanson!" My name reached me, faintly but clearly, through the medium of my menore. "This is Croy. Do you understand me?"

"Yes," I replied instantly. "Are you safe?"

"I am safe. All is well. Very well. Will you promise me now to receive what I am about to send, without interruption?"

"Yes," I replied, thoughtlessly and eagerly. "What is it?"

"I have had a long conference with the chief or head of the Chisee," explained Croy rapidly. "He is very intelligent, and his people are much further advanced than we thought.

"Through some form of communication, he has learned of the fight with the weird birds; it seems that they are—or were—the most dreaded of all the creatures of this dark world. Apparently, we got the whole brood of them, and this chief, whose name, I gather, is Wieschien, or something like that, is naturally much impressed.

"I have given him a demonstration or two with my atomic pistol and the flashlight—these people are fairly stricken by a ray of light directly in the eyes—and we have reached very favorable terms.

"I am to remain here as chief bodyguard and adviser, of which he has need, for all is not peaceful, I gather, in this kingdom of darkness. In return, he is to give up his plans to subjugate the rest of Antri; he has sworn to do this by what is evidently, to him, a very sacred oath, witnessed solemnly by the rest of his council.

"Under the circumstances, I believe he will do what he says; in any case, the great canal will be filled in, and the Antrians will have plenty of time to erect a great series of disintegrator ray stations along the entire twilight zone, using the broad fan rays to form a solid wall against which the Chisee could not advance even did they, at some future date, carry out their plans. The worst possible result then would be that the people in the sunlit portion would have to migrate from certain sections, and perhaps would have day and night, alternately, as do other worlds.

"This is the agreement we have reached; it is the only one that will save this world. Do you approve, sir?"

"No! Return immediately, and we will show the Chisee that they cannot hold an officer of the Special Patrol as a hostage. Make haste!"

"It's no go, sir," came the reply instantly. "I threatened them first. I explained what our disintegrator rays would do, and Wieschien laughed at me.

"This city is built upon great subterranean passages that lead to many

hidden exits. If we show the least sign of hostility the work will be resumed on the canal, and before we can locate the spot, and stop the work, the damage will be done.

"This is our only chance, sir, to make this expedition a complete success. Permit me to judge this fact from the evidence I have before me. Whatever sacrifice there is to make, I make gladly. Wieschein asks that you depart at once, and in peace, and I know this is the only course. Good-by, sir; convey my salutations to my other friends upon the old *Ertak*, and elsewhere. And now, lest my last act as an officer of the Special Patrol Service be to refuse to obey the commands of my superior officer, I am removing the menore. Good by!"

I tried to reach him again, but there was no response.

Gone! He was gone! Swallowed up in darkness and in silence!

Dazed, shaken to the very foundation of my being, I stood there between the shadowy bulk of the *Ertak* and the towering mass of the great silent pile that was the seat of government in this strange land of darkness, and gazed up at the dark sky above me. I am not ashamed, now, to say that hot tears trickled down my cheeks nor that as I turned back to the *Ertak*, my throat was so gripped by emotion that I could not speak.

I ordered the exit closed with a wave of my hand; in the navigating room I said but four words: "We depart at once."

At the third meal of the day I gathered my officers about me and told them, as quickly and as gently as I could, of the sacrifice one of their number had made.

It was Kincaide who, when I had finished, rose slowly and made reply.

"Sir," he said quietly, "we had a friend. Some day, he might have died. Now he will live forever in the records of the Service, in the memory of a world, and in the hearts of those who had the honor to serve with him. Could he—or we—wish more?"

Amid a strange silence he sat down again, and there was not an eye among us that was dry.

I hope that the snappy young officer who visited me the other day reads this little account of bygone times.

Perhaps it will make clear to him how we worked, in those nearly forgotten days, with the tools we had at hand. They were not the perfect tools of to-day, but what they lacked, we somehow made up.

That fine old motto of the Service, "Nothing Less Than Complete Success," we passed on unsullied to those who came after us.

I hope these youngsters of to-day may do as well.

Blind Flight

by Donald A. Wollheim

At the time this story was written, radar was a closely guarded military secret to which the author had no access. But the fact of radar in no way alters the logic of this story. The story was inspired as an answer to the often posed and usually evaded problem of how life can be preserved during a space flight when the unshielded rays of an atomic furnace such as the sun are given full play on the small vessel without the muffling blanket of the atmosphere. It is a far more dangerous problem than rocket engineers admit. It may well be that such a queer space flight as the one in this story may be the norm for those days to come. A space flight devoid of starry vistas was glorious posing of trim uniforms. It is a fact that if what we know of cosmic rays and similar stellar rays turn out to be as deadly as suspected then no space flier will ever see the stars!

EDWARD SEDGWICK took a last glimpse at the steel sphere he was to occupy for the next few days, glanced once again at the blue sky, shook hands with the head of the Commission on Space Flight, climbed up the metal ladder and crawled into the circular orifice just under the sphere's equator. As he progressed on hands and knees down the narrow tubular passage, the hissings and clicks of the thick metal plug being fastened hermetically behind him, brought to his attention that he was now entirely cut off from the world of man.

The huge ball, towards whose exact center he so laboriously crawled, was about one hundred feet in diameter and perfectly spherical. Though the outer surface was honeycombed with vents and sensitive cells, there was no window or viewing port of any description. Sedgwick was being interred alive in the middle of this globe of metal, yet, as the clicks of other metal partitions fell into place behind him, he was not afraid in the slightest.

He had wondered whether he would feel fear when the day for the real test came. Sometimes he had awakened at night with a cold sweat and a ghastly dream of burial alive in an iron coffin. Yet now, as he neared the little bubble in the core, he realized in a detached objective sort of way that he was quite calm and collected. He knew that was the factor which had made him desirable for this job, nonetheless each time he realized it, it came as a sort of surprise.

Now he climbed down into the control bubble and the last disc swung shut, sealing off the passage. He seated himself in the heavily cushioned

arm chair that swung so marvelously on universal pivots. He could swing this chair around by merely shifting his body so that it could face any conceivable part of the perfectly globoid interior of his chamber. No matter to the fact that if he tried it now he might be hanging upside down. Very soon things like up and down would cease to exist save as unfunctioning markings on two or three of the innumerable dials and meters that studded the control bubble's interior. He could reach out with a hand and touch anything in it, so small was it, yet he was not stifled or crowded. He had switched on the air and conditioning mechanism as soon as he entered and he knew that the living conditions in the tiny room would remain habitable and comfortable indefinitely.

Fool proof automatic controls were in operation. The air was constantly being cleansed and replaced. The temperature of the chamber would never vary by more than two degrees no matter what the outside conditions were.

Sedgwick strapped himself in and swivelled around to face the planet level controls. From his central position he was like the base of a will that drives a body from its hidden place in the skull encircled brain. His eyes drifted easily over the readings with the skill that came of months' intensive training. Outside temperature on top of the sphere was 85, on the bottom 64. It was a hot day and the sun shining on the metal did that, he knew. He knew exactly which way he now faced and exactly what atmospheric conditions were. He glanced at the time and saw that he should start. He reached over and turned a switch. Power was on now and the lights on the sphere's exterior glowed. That was a signal to the crowd outside to clear away.

He allowed five minutes and then pressed eight buttons on the rocket panel and threw the master control. There was a slight jar and he felt his seat taking up the added pressure of his body. His acceleration meter was now in operation and he watched carefully as his speed mounted. The sphere was plunging upwards into the sky, his controls told him, the rocket vents on the earth side of the globe blasting away. He set more of them into operation and his velocity increased sharply. As he watched his speed mount, he never let his eyes lose track of the other salient recorders. It was an old practice and he was not worried. His acceleration steady, rockets firing in order, fuel flow proper, surface temperature changing rapidly, air-pressure dropping swiftly. Tubes recorded no overheating.

A glance at the photosensitive meters for the cells set in the surface revealed that it was now almost fully dark outside. Things were in perfect order.

For a half hour the great sphere continued its acceleration upwards. When finally the velocity dial registered what he wanted, the pilot cut the rockets entirely. Far in the recesses of the globe, automatic switches cut out the feed to each of the many rocket jets set near the surface and the explosive liquid fuel ceased to feed into the semi atomic blasters. The sphere floated free. It was no longer in the Earth's atmosphere but in the realm of interplanetary space.

Sedgwick noted that gravity had ceased now that the ship was at rest.

He knew his velocity, even with the rockets off, would continue unabated. The sphere had passed the escape-speed for Terra. It was in free space, the dials registered no pressure on the hull. To one side a dial registered a steady flow of heat, that would be the sun. To another side, a dial registered a dim flow of light. That would be the earth-glow. The rest was darkness.

But the man was strapped in his seat and there was nothing loose in the bubble and, outside of the curious feeling in his stomach and head and the indisputable evidence of the omniscient meters, there was no evidence that the sphere was free of planetary gravity, free in the empty void between the planets.

From his photo-cells, the pilot knew what things were like outside. He flicked another button and cameras in the surface took a record of the scene, a record which would be much more accurate than anything he could see with the naked eye.

Sedgwick wondered whether man ever would see space with the bare eye. He glanced at another part of his controls and reflected that it was unlikely. Cosmic rays were bombarding the craft with incredible fury, unhampered by a hundred miles of atmosphere which alone kept life from being burned out of existence on earth. Here, he knew that only several shells of thick lead and steel, fifty feet of metal machinery in any direction, concentrations of chemicals and fuel, air supplies, food and swarms of wire, kept the cosmic rays from reaching him and torturing the life from his flesh.

Protoplasm is a very delicate chemical compound, the thought suddenly occurred to Sedgwick, and it must be kept carefully sealed from raw force. It survived only within certain very narrow limits of temperature and under certain very restricted conditions of gases. Here he glanced again at the conditioning charts but all was well. Those limited conditions that kept his metal fish bowl fit for the fish were working to perfection. Metal and rubber, plastics and glass, electricity and atoms, all lifeless and unimaginative, were harnessed here to keeping the little bit of water and carbon mush that was Edward Sedgwick liquescent. The subjective term was "alive."

Still, this little bit of mush, this complex and unstable compound that was man, had built for itself the means wherewith it could master the antagonistic cosmos. Here was man, here within this little bubble of air in the midst of this greater bubble of metal, bravely dashing around in the domain hitherto exclusively reserved for planets and comets and suns. Mankind had usurped the privileges of stars and Sedgwick was the first to exercise this conquest.

He reset his meters. His chair swivelled slightly. Rapidly his hands pressed a half dozen buttons. Acceleration started again. An integrator clicked out a set of numbers in its little glass face. They were set up on the controls and put to work.

He watched the glass panels as the maneuver went into effect. The ship accelerated again. The direction was different. The sun was below him. The sphere was heading away from the sun. The earth too was behind.

Ahead was Mars. Not directly ahead but the sphere and the planet were both travelling towards the same point in space.

Sedgwick was not going all the way to Mars. He was going only part way there. Cameras would record further data and the globe would return to earth. Maybe it would go all the way to the red planet some day but this was only a test.

For two days the sphere continued on its course. Acceleration of the rockets had been cut off after about four hours. At that time the metal ball was travelling at an unbelievable speed. Sedgwick could have made Mars in a week at that rate but he knew his limitations and he had his orders. He had been given this post because of his level headed judgment, he did not betray that trust.

During those forty eight hours, Sedgwick had little to do besides check his controls. He was fed regularly by an automata panel which every four hours thrust pellets of food-concentrate at him and the nozzle of a water valve. Also he cat napped when he felt tired. Automatic alarms would have awakened him if there had been need.

At one time there had been a momentary flickering of gravitation dials. There was nothing to be done for what was detected was a sizable body about fifty thousand miles away. The sizable body being undoubtedly an asteroid of perhaps ten miles diameter. No concern.

Only one other thing broke the monotony. One of a cluster of photo-sensitive cells on the sphere's skin went black. It was smashed. A meteor obviously, a tiny pellet of rock flying through space. Sedgwick wondered why more had not hit him; he had expected more trouble than that. Then he realized that after all space was really terribly terribly empty and besides it was possible a number of others had hit the surface where it would not be detected nor indeed make any difference.

The sphere was brought to a halt at the proper time and hung in space slowly revolving on its own axis. It was now about six million miles from Mars and there it would wait for ten hours or so until the red planet had been thoroughly photographed by the telescopic cameras and recorded in other ways by other instruments.

The man could detect where it was by the glow registering on the surface cell clusters. He could tell where it was by the gravitational directives functioning on the panels. He could tell exactly its mass and speed, his own speed, the Earth's, the sun's and every other major body's. He knew what their orbits were and what was to be done to bring the ship back to Earth.

He laughed to himself briefly when the thought struck him that he had now been in space almost three days and yet had not set eyes on the stars. It struck him that that was probably the longest such period away from a sight of the stars that he had ever been in his life. And yet, actually, he was surrounded by them!

As he was setting the dials to bring the ship back in an Earth bound orbit, another gravitational recorder started functioning. A body about ten thousand miles away, a small body. Presumably another wandering asteroid. They should be frequent here even though this was inside the orbit of

Mars. Many asteroids crossed that orbit even though the majority stayed between Mars and Jupiter.

Casually Sedgwick computed the orbit of the new body, saw that it would pass well beyond him and paid no further attention. It was not until after rockets were accelerating the sphere back towards the Earth that he noticed that his original calculation on the new asteroidal body was in error. Apparently the mass would pass uncommonly close to where the sphere was. Perturbed over the original mistake, which should have been impossible, he speeded up the rockets a bit and shifted the globe slightly. It should be sufficient to put distance between the asteroid and the ball.

A bit later he noted that mistake had again occurred. The asteroid was still heading for an intersection with his sphere. Either the tiny planet had changed its orbit, which was impossible, or somehow the wires and mechanisms of the outside sensitives were deranged. That was possible and it was also dreadfully serious. A meteor perhaps? It might have buried itself into something and created a short circuit somewhere. The dials showed no such thing though and it was unlikely that any single meteor could have fooled all the dials.

Again he shifted the sphere's course and this time he watched the dials registering the asteroid. Sure enough the gravitational sensitives altered slowly and surely to bring the foreign body's shift into a new orbit that would keep it on an intersection with the sphere.

Then Sedgwick noticed something else. That the speed of the asteroid had altered, had accelerated. If the fixed velocity of the little astral wanderer had been the same, it would not have mattered much where it headed. The velocity of the globe was so much greater and was quite capable of out-running any natural body. But the speed of this strange body had altered; it had speeded up and it had not lost anything of the original distance between them. In fact the man now realized that it was accelerating even more than his sphere and was steadily closing the gap!

This was no asteroid. He was sure of that now. Coldly sure of it and he wondered at himself for his own coolness. Then with a start he recognized his own emotion. It was that calmness that settled over him with every stress and emergency. This then was a serious crisis.

What was this body? He dared not think and yet he knew he must. There was one conclusion and one only. No comet, no asteroid, no meteor could change its orbit. No lifeless body could speed itself up and so diabolically and consistently keep its path in space so that it would overhaul and meet up with the sphere no matter what shift the latter made. This was, this could only be, an artificially created mass, an intelligently directed body, another space travelling vehicle for an intelligent race!

But from where? From Earth never. From Mars then? Maybe. It was a likely possibility. He had approached Mars. He had hung for a while in space surveying it. Could it be that Mars was protected? That Mars was patrolled? That something was coming to investigate him?

Sedgwick had no mind to allow that. He knew several things. One, that he had no means of communicating with another space sphere. Two, that

his first duty was to bring back his sphere safe and intact with all its records unimpaired. Three, that if alien hands or alien machines tried to pry into his craft, it would almost certainly accomplish ruin and his death.

Therefore Sedgwick ran. Rapidly he activated rockets as fast as the increasing velocity and acceleration would permit. And as his speed increased, he kept refiguring his orbits so as to cut his path to Earth shorter and shorter.

As the sphere ran, so did the pursuer. When one put on a burst of speed, so did the other. Steadily the distance between the two bodies grew less. Hours went by and the sphere was blasting along at maximum possible acceleration. Now the alien body was close, was within a mile or so and still gaining.

Sedgwick was able to determine more things about the enigma. His registers were delicate enough to detect things they could not while it was far away. The other thing was several times larger than the globe, it was egg-shaped, and it had a high reflecting scale such as polished metal would have.

It was obvious that the pursuer must be gotten rid of within the next hour or all would be lost anyway. At this speed of travel, he would have to start decelerating soon or else the sphere would overshoot the Earth and never return. There was no dodging or outrunning the other possible any more. Now he would have to fight it.

The ship had guns. Sedgwick had laughed at the Commission when they had installed them. He had said that they could never expect to use them and now he knew that whoever it was on the Commission that had ordered them had had more foresight than seemed.

The guns were six in number, two at the poles and four along the equator. They did not project from the surface. Only the pit of their muzzles showed and they were covered with sliding metal discs when not in use. They were naval ordnance, loaded by automatic feeds, fired by the rocket fuel and hurling shells filled with terrifically powerful explosives.

The recoil of a gun firing was taken up by automatic discharge of a blank shot from the gun on the opposite side of the sphere. In this way the course of the globe was not altered by the recoil.

Sedgwick shifted the sphere slightly until one of his polar guns was aimed at the pursuer. Then he waited. This shot had to be effective. He dared not miss or blunder.

Steadily the sphere roared on towards Earth and steadily the strange pursuer followed, closer and closer. It narrowed the distance from a mile to a half mile. Sedgwick was impelled to fire but restrained himself. Through his head floated the old Bunker Hill injunction about waiting for the whites on their eyes. This shot had to be good. He knew nothing of the armament of the mysterious follower, therefore his first shot would have to be the leading one.

Now he watched the dials closely. The giant egg was a few hundred yards away. His finger rested on the firing button. For a second it hesitated and then pressed down.

He never noticed the shock for it was counterbalanced. But he saw the meter of the gun rapidly check off shots as shells slid one after another into the breach and were blasted off point blank at the strange mass. One, two, three, four, five. . . .

Then suddenly the sphere received a blow as if a giant bat had swung and connected with it. The pilot's chair swung wildly about on its gymbals and all the instruments vibrated madly. When it had steadied again, Sedgwick saw that the sphere was hurtling away from the scene of the shooting. The dials registered the terrific explosion that must have taken place. The concussion had hurled the globe off its course.

Where there had been a gravitational force manifesting close by, now there was none. The pursuer was no more. It must have blown to smithereens when the shells hit it.

Sedgwick rapidly recalculated his course and shot on homewards towards the earth. A number of photo-cells were blank on the explosion side, several rocket tubes were out of commission and other things connected with that side were awry. The sphere, however, was entirely under control and quite navigable.

Landing blind was not so hard as he had only to follow the radio beam. The radio had stopped functioning as soon as he had left the earth as had been predicted and it had started again when the sphere successfully eased to within five miles of the surface. The great ball slid gently on its rockets into the place of its origin and came to rest.

When Sedgwick had crawled out through the exit tube and had shaken himself free from the stiffness of his muscles and the hands of the small crowd, he realized that it was night and the stars were shining down. That was what held his attention the longest, that and the great gobs of raw black *flesh* that was smeared over the sphere's side when the unseen pursuer exploded.

Rhythm of the Spheres

by A. Merritt

A. Merritt was a poet before he was a novelist, and that fact is clearly demonstrated in this unusual short story. It is unusual for the run of science-fiction, for Merritt would never be likely to write down to any pulp magazine's formula, and it is unusual for Merritt himself, for as a rule he did not write either short stories or science-fiction. This is both. It is a short story, one of his handful, and it is science-fiction written at the specific request of a group of ardent fans. It is, we think, also poetry. The complaint of the poet and artist against the mechanic and his works is Merritt's theme . . . and he does it most violent justice.

NARODNY, the Russian, sat in his laboratory. Narodny's laboratory was a full mile under earth. It was one of a hundred caverns, some small and some vast, cut out of the living rock. It was a realm of which he was sole ruler. In certain caverns garlands of small suns shone; and in others little moons waxed and waned as the moon waxed and waned over earth; and there was a cavern in which reigned perpetual dawn, dewy, over hy beds and violets and roses; and another in which crimson sunsets baptized in the blood of slain day dimmed and died and were born again behind the sparkling curtains of the aurora.

And there was one cavern ten miles from side to side in which grew flowering trees and trees which bore fruits unknown to man for many generations. Over this great orchard one yellow sunlike orb shone, and clouds trailed veils of rain upon the trees and miniature thunder drummed at Narodny's summoning.

Narodny was a poet—the last poet. He did not write his poems in words but in colors, sounds, and visions made material. Also, he was a great scientist—the greatest in his peculiar field. Thirty years before, Russia's Science Council had debated whether to grant him the leave of absence he had asked, or to destroy him. They knew him to be unorthodox. How deadly so they did not know, else after much deliberation, they would not have released him. It must be remembered that of all nations, Russia then was the most mechanized, most robot ridden.

Narodny did not hate mechanization. He was indifferent to it. Being truly intelligent he hated nothing. Also was indifferent to the whole civilization man had developed and into which he had been born. He had no

feeling of kinship to humanity. Outwardly, in body, he belonged to the species. Not so in mind. Like Lorb, a thousand years before, he considered mankind a crazy race or half monkeys, intent upon suicide. Now and then, out of the sea of lunatic mediocrity, a wave uplashed that held for a moment a light from the sun of truth—but soon it sank back and the light was gone. Quenched in the sea of stupidity. He knew that he was one of those waves.

He had gone, and he had been lost to sight by all. In a few years he was forgotten. Unknown and under another name, he had entered America and secured rights to a thousand acres in what of old had been called Westchester. He had picked this place because investigation had revealed to him that of ten localities on this planet it was most free from danger of earthquake or similar seismic disturbance.

The man who owned it had been whimsical; possibly an atavism—like Narodny, although Narodny would never have thought of himself as that. At any rate, instead of an angled house of glass such as the thirtieth century built, this man had reconstructed a rambling old stone house of the nineteenth century. Few people lived upon the open land in those days; and they had withdrawn into the confines of the city-states.

New York, swollen by its meals of years, was a fat belly of mankind still many miles away. The land around the house was forest covered.

A week after Narodny had taken the house, the trees in front of it had melted away leaving a three-acre, smooth field. It was not as though they had been cut, but as though they had been dissolved. Later that night a great airship had appeared upon this field abruptly, as though it had blinked out of another dimension. It was rocket shaped but noiseless. And immediately a fog had fallen upon airship and house, hiding them. Within this fog, if one could have seen, was a wide tunnel leading from the air cylinder's door to the door of the house.

And out of the airship came swathed figures, ten of them, who walked along that tunnel, were met by Narodny and the door of the old house closed on them.

A little later they returned, Narodny with them, and out of an opened hatch of the airship rolled a small flat car on which was a mechanism of crystal cones rising around each other to a central cone some four feet high. The cones were upon a thick base of some glassy material in which was imprisoned a restless green radiance.

Its rays did not penetrate that which held it, but it seemed constantly seeking, with suggestion of prodigious force, to escape. For hours the strange thick fog held. Twenty miles up in the far reaches of the stratosphere, a faintly sparkling cloud grew, like a condensation of cosmic dust.

And just before dawn the rock of the hill behind the house melted away, like a curtain that had covered a great tunnel. Five of the men came out of the house and went into the airship. It lifted silently from the ground, slipped into the aperture and vanished. There was a whispering sound, and when it had died away the breast of the hill was whole again.

The rocks had been drawn together like a closing curtain and boulders studded it as before. That the breast was now slightly concave where before it had been convex, none would have noticed.

For two weeks the sparkling cloud was observed far up in the stratosphere, was commented upon idly, and then was seen no more. Narodny's caverns were finished.

Half of the rock from which they had been hollowed had gone with that sparkling cloud. The balance, reduced to its primal form of energy, was stored in blocks of the vitreous material that had supported the cones, and within them it moved as restlessly and always with that same suggestion of prodigious force. And it was force, unthinkably potent, from it came the energy that made the little suns and moons, and actuated the curious mechanisms that regulated pressure in the caverns, supplied the air, created the rain, and made of Narodny's realm a nule deep under earth the Paradise of poetry, of music, of color and of form which he had conceived in his brain and with the aid of those ten others had caused to be.

Now of the ten there is no need to speak further. Narodny was the Master. But three, like him, were Russians, two were Chinese; of the remaining five, three were women—one German in ancestry, one Basque, one an Eurasian; a Hindu who traced his descent from the line of Gautama; a Jew who traced his from Solomon.

All were one with Narodny in indifference to the world, each with him in his viewpoint on life; and each and all lived in his or her own Eden among the hundred caverns except when it interested them to work with each other. Time meant nothing to them. Their researches and discoveries were solely for their own uses and enjoyments. If they had given them to the outer world they would only have been ammunition for warfare either between men upon Earth or Earth against some other planet.

Why hasten humanity's suicide? Not that they would have felt regret at the eclipse of humanity. But why trouble to expedite it? Time meant nothing to them, because they could live as long as they desired—barring accident. And while there was rock in the world, Narodny could convert it into energy to maintain his Paradise—or to create others.

The old house began to crack and crumble. It fell—much more quickly than the elements could have brought about its destruction. Then trees grew among the ruins of its foundations; and the field that had been so strangely cleared was overgrown with trees. The land became a wood in a few short years, silent except for the roar of an occasional rocket passing over it and the songs of birds which had found there a sanctuary.

But deep down in earth, within the caverns, there were music and song and mirth and beauty. Gossamer nymphs circled under the little moons. Pan piped. There was revelry of antique harvesters under the small suns. Grapes grew and ripened, were pressed, and red and purple wines were drunk by Bacchantes who fell at last asleep in the arms of fauns and satyrs. Oreads danced under the pale moon-bows, and sometimes Centaurs wheeled

and trod archaic measures beneath them to the drums of their hoofs upon the mossy floor. The old Earth lived again.

Narodny listed to drunken Alexander raving to Thais among the splendors of conquered Persepolis; and he heard the crackling of the flames that at the whim of the courtesan destroyed it. He watched the siege of Troy and counted with Homer the Achaean ships drawn up on the strand before Troy's walls; or saw with Herodotus the tribes that marched behind Xerxes—the Caspians in their cloaks of skin with their bows of cane; the Ethiopians in their skins of leopards with spears of antelope horns; with javelins made hard by fire; the Thracians with the heads of foxes upon their heads; the Moschians who wore helmets made of wood and the Cabalians who wore the skulls of men.

For him the Eleusinian and the Osirian mysteries were re-enacted, and he watched the women of Thrace tear to fragments Orpheus, the first great musician. At his will, he could see rise and fall the Empire of the Aztecs, the Empire of the Incas; or beloved Caesar slain in Rome's Senate; or the archers at Agincourt; or the Americans in Bellean Wood. Whatever man had written—whether poets, historians, philosophers or scientists—his strangely shaped mechanisms could bring before him, changing the words into phantoms real as though living.

He was the last and greatest of the poets—but also he was the last and greatest of the musicians. He could bring back the songs of ancient Egypt, or the chants of more ancient Ur. The songs that came from Moussourgsky's soul of Mother Earth, the harmonies of Beethoven's deaf brain or the chants and rhapsodies from the heart of Chopin. He could do more than restore the music of the past. He was master of sound.

To him, the music of the spheres was real. He could take the rays of the stars and planets and weave them into symphonies. Or convert the sun's rays into golden tones no earthly orchestra had ever expressed. And the silver music of the moon—the sweet music of the moon of spring, the full-throated music of the harvest moon, the brittle crystalline music of the winter moon with its arpeggios of meteors—he could weave into strains such as no human ear had ever heard.

So Narodny, the last and greatest of poets, the last and greatest of musicians, the last and greatest of artists—and in his inhuman way, the greatest of scientists—lived with the ten of his choosing in his caverns. And, with them, he consigned the surface of the earth and all who dwelt upon it to a negative Hell—

Unless something happening there might imperil his Paradise!

Aware of the possibility of this danger, among his mechanism were those which brought to eyes and ears news of what was happening on earth's surface. Now and then, they amused themselves with these.

It so happened that on that night when the Ruler of Robots had experimented with a new variety of ray—a space warper—Narodny had been weaving the rays of Moon, Jupiter and Saturn into Beethoven's Moonlight Symphony. The moon was a four day crescent. Jupiter was at one cusp,

and Saturn hung like a pendant below the bow. Shortly Orion would stride across the Heavens and bright Regulus and red Aldebaran, the Eye of the Bull, would furnish him with other chords of starlight remoulded into sound.

Suddenly the woven rhythms were ripped hideously. A devastating indescribable dissonance invaded the cavern. Beneath it, the nymphs who had been dancing languorously to the strains quivered like mist wraiths in a sudden blast and were gone; the little moons flared, then ceased to glow. The tonal instruments were dead. And Narodny was felled as though by a blow.

After a time the little moons began to glow again, but dimly; and from the tonal mechanisms came broken, crippled music. Narodny stirred and sat up, his lean, high-cheeked face more Satanic than ever. Every nerve was numb; then as they revived, agony crept along them. He sat, fighting the agony until he could summon help. He was answered by one of the Chinese.

Narodny said: "It was a spatial disturbance, Lao. And it was like nothing I have ever known. The Ruler of Robots is perfecting a ray with which to annihilate mankind."

Narodny smiled "I care nothing for mankind yet I would not harm them, willingly. And it has occurred to me that I owe them, after all, a great debt. Except for them I would not be. Also, it occurs to me that the robots have never produced a poet, a musician, an artist—" He laughed: "But it is in my mind that they are capable of one great art at least! We shall see."

Down in the chamber of screens Narodny laughed again.

He said, "Lao, is it that we have advanced so in these few years? Or that man has retrogressed? No, it is the curse of mechanization that destroys imagination. For look you, how easy is the problem of the robots. They began as man made machines. Mathematical, soulless, insensible to any emotion. So was primal matter of which all on earth are made, rock and water, tree and grass, metal, animal, fish, worm, and men. But somewhere, somehow, something was added to this primal matter, combined with it - used it. It was what we call life. And life is consciousness. And therefore largely emotion. Life establishes its rhythms—and its rhythm being different in rock and crystal, metal, fish, and man - we have these varying things.

"Well, it seems that life has begun to establish its rhythm in the robots. Consciousness has touched them. The proof? They have established the idea of common identity—group consciousness. That in itself involves emotion. But they have gone further. They have attained the instinct of self preservation. They are afraid mankind will revolt against them. And that, my wise friend, connotes fear—fear of extinction. And fear connotes anger, hatred, arrogance—and many other things. The robots, in short, have become emotional to a degree. And therefore vulnerable to whatever may amplify and control their emotions. They are no longer mechanisms.

So, Lao, I have in mind an experiment that will provide me study and

amusement through many years. Originally, the robots are the children of mathematics. I ask to what is mathematics most closely related? I answer—to rhythm—to sound—to sounds which raise to the n th degree the rhythms to which they will respond. Both mathematically and emotionally."

Lao said: "The sonic sequences?"

Narodny answered: "Exactly. But we must have a few robots with which to experiment. To do that means to dissolve the upper gate. But that is nothing. Tell Mariny and Euphroysne to do it. Net a ship and bring it here. Bring it down gently. You will have to kill the men in it, of course, but do it mercifully. Then let them bring me the robots. Use the green flame on one or two—the rest will follow, I'll warrant you."

The hill behind where the old house had stood trembled. A circle of pale green light gleamed on its breast. It dimmed and where it had been was the black mouth of a tunnel. An airship, half rocket, half winged, making its way to New York, abruptly drooped, arched, fell gently, like a moth, close to the yawning mouth of the tunnel.

Its door opened, and out came two men, pilots, cursing. There was a little sigh from the tunnel's mouth and a silvery misty cloud sped from it, over the pilots and straight through the opened door. The pilots crumpled to the ground. In the airship half a dozen other men, slaves of the robots, slumped to the floor, smiled, and died.

There was a full score robots in the ship. They stood, looking at the dead men and at each other. Out of the tunnel came two figures swathed in metallic glimmering robes. They entered the ship. One said: "Robots, assemble."

The metal men stood, motionless. Then one sent out a shrill call. From all parts of the ship the metal men moved. They gathered behind the one who had sent the call. They stood behind him, waiting.

In the hand of one of those who had come from the tunnel was what might have been an antique flash-light. From it sped a thin green flame. It struck the foremost robot on the head, sliced down from the head to the base of the trunk. Another flash, and the green flame cut him from side to side. He fell, sliced by that flame into four parts. The four parts lay, inert as their metal, upon the floor of the compartment.

One of the shrouded figures said: "Do you want further demonstration—or will you follow us?"

The robots put heads together; whispered. Then one said: "We will follow."

They marched into the tunnel, the robots making no resistance nor effort to escape. They came to a place whose floor sank with them until it had reached the caverns. The machine men still went docilely. Was it because of curiosity mixed with disdain for these men whose bodies could be broken so easily by one blow of the metal appendages that served them for arms? Perhaps.

They came to the cavern where Narodny and the others awaited them.

Marinoff led them in and halted them. These were the robots used in the flying ships—their heads cylindrical, four arm appendages, legs triple-jointed, torsos slender. The robots, it should be understood, were differentiated in shape according to their occupations. Narodny said: "Welcome, robots! Who is your leader?"

One answered: "We have no leaders. We act as one."

Narodny laughed: "Yet by speaking for them you have shown yourself the leader. Step closer. Do not fear—yet."

The robot said: "We feel no fear. Why should we? Even if you should destroy us who are here, you cannot destroy the billions of us outside. Nor can you breed fast enough, become men soon enough, to cope with us who enter into life strong and complete from the beginning."

He flicked an appendage toward Narodny, and there was contempt in the gesture. But before he could draw it back a bracelet of green flame encircled it at the shoulder. It had darted like a thrown loop from something in Narodny's hand. The robot's arm dropped clanging to the floor, cleanly severed. The robot stared at it unbelievably, threw forward his other three arms to pick it up. Again the green flame encircled also his legs above the second joints. The robot crumpled and pitched forward, crying in high pitched shrill tones to the others.

Swiftly the green flame played among them. Legless, armless, some decapitated, all the robots fell except two.

"Two will be enough," said Narodny. "But they will not need arms—only feet."

The flashing green bracelets encircled the appendages and excised them. The pair were marched away. The bodies of the others were taken apart, studied, and under Narodny's direction curious experiments were made. Music filled the cavern, strange chords, unfamiliar progressions shattering raggios and immense vibrations of sound that could be felt but not heard by the human ear.

And finally this last deep vibration burst into hearing as a vast drone, hummed up and up into swift tingling tempest of crystalline, brittle notes, and still ascending passed into shrill high pipings, and continued again unheard as had the prelude to the droning. And thence it rushed back, the droning and the crystalline storm reversed, into the drone and the silence—then back and up.

And the bodies of the broken robots began to quiver, to tremble, as though every atom within them were dancing in ever increasing, rhythmic motion. Up rushed the music and down—again and again. It ended abruptly in a fall flight with one crashing note.

The broken bodies ceased their quivering. Tiny star shaped cracks appeared in their metal. Once more the note sounded and the cracks widened. The metal splintered.

Narodny said: "Well, there is the frequency for the rhythm of our robots. The destructive unison. I hope for the sake of the world outside it is not

also the rhythm of many of their buildings and bridges. But, after all, in any war there must be casualties on both sides."

Lao said "Earth will be an extraordinary spectacle—a plaintive phenomenon, for a few days."

Narodny said: "It is going to be an extraordinarily uncomfortable Earth for a few days, and without doubt many will die and more go mad. But is there any other way?"

There was no answer. He said: "Bring in the two robots."

They brought them in.

Narodny said: "Robots—were there ever any of you who could poetize?"

They answered: "What is poetize?"

Narodny laughed: "Never mind. Have you ever sung—made music—painted? Have you ever dreamed?"

One robot said with cold irony: "Dreamed? No—for we do not sleep. We leave all that to men. It is why we have conquered them."

Narodny said, almost gently: "Not yet, robot. Have you ever danced? No? It is an art you are about to learn."

The unheard note began, droned up and through the tempest and away and back again. And up and down—and up and down, though not so loudly as before. And suddenly the feet of the robots began to move, to shuffle. Their leg joints bent; their bodies swayed. The note seemed to move now here and now there about the chamber, and always following it, grotesquely, like huge metal marionettes, they followed it. The music ended in the crashing note. And it was as though every vibrating atom of the robot bodies had met with some irresistible obstruction. Their bodies quivered and from their voice mechanisms came a shriek that was a hideous blend of machine and life. Once more the drone, and once more and once more and then, again, the abrupt stop.

There was a brittle crackling all over the conical heads, all over the bodies. The star shaped splinterings appeared. Once again the drone—but the two robots stood, unresponding. For through the complicated mechanisms which under their carapaces animated them were similar splinterings.

The robots were dead!

Narodny said "By tomorrow we can amplify the sonar to make it effective in a 300 mile circle. We will use the upper cavern, of course. It means we must take the ship out again. In three days Marinott, you should be able to cover the other continents. See to it that the ship is completely proof against the vibrations. To work. We must act quickly—before the robots can discover how to neutralize them."

It was exactly at noon the next day that over all North America a deep inexplicable droning was heard. It seemed to come not only from deep within earth, but from every side. It mounted rapidly through a tempest of tingling crystalline notes into a shrill piping and was gone. Then back it rushed from piping to drone; then up and out and down. Again and again. And over all North America the hordes of robots stopped in whatever they

were doing. Stopped—and then began to dance—to the throbbing notes of that weirdly fascinating music—that hypnotic rhythm which seemed to flow from the bowels of the earth.

They danced in the airships and scores of those ships crashed before the human crew could gain control. They danced by the thousands in the streets of the cities—in grotesque rigadoons, in bizarre sarabands; with shuffle and hop and jig the robots danced while the people fled in panic and hundreds of them were crushed and died in those panics. In the great factories, and in the tunnels of the lower cities, and in the mines—everywhere the sound was heard—and everywhere it was heard—the robots danced . . . to the piping of Narodny, the last great poet . . . the last great musician.

And then came the crashing note—and over all the country the dance halted. And began again . . . and ceased . . . and began again. . . .

Until at last the street, the lower tunnels of the lower levels, the mines, the factories, the homes, were littered with metal bodies shot through and through with star-shaped splinterings.

In the cities the people cowered, not knowing what blow was to fall upon them . . . or milled about in fear-maddened crowds, and many more died. . . .

Then suddenly the dreadful droning, the shattering tempest, the intolerable high piping ended. And everywhere the people fell, sleeping among the dead robots—as though they had been strung to the point of breaking, sapped of strength and then abruptly relaxed.

And as though it had vanished from Earth, America was deaf to cables, to all communication beyond the gigantic circle of sound.

But that midnight over all Europe the drone sounded and Europe's robots began their dance of death . . . and when it had ended a strange and silent rocket ship that had hovered high above the stratosphere sped almost with the speed of light and hovered over Asia—and next day Africa heard the drone while the black answered it with his tom-toms—then South America heard it and last of all far off Australia . . . and everywhere terror trapped the peoples and panic and madness took their grim toll.

Until of all that animate metal horde that had fettered Earth and humanity there were a few scant hundreds left—escaped from the death dance through some variant in their constitution. And, awakening from that swift sleep, all over Earth those who had feared and hated the robots and their slavery rose against those who had fostered the metal domination, and blasted the robot factories to dust.

Again the hill above the caverns opened, the strange torpedo ship blinked into sight like a ghost, as silently as a ghost floated into the hull and the rocks closed behind it.

Narodny and the others stood before the gigantic television screen, shifting upon it images of city after city, country after country, over all Earth's surface. Lao, the Chinese, said: "Many men died, but many are left. And

the Ruler of Robots is no more. They may not understand—but to them it was worth it."

Narodny mused: "It drives home the lesson—what man does not pay for, he values little."

And Narodny shook his head, doubtfully. But soon harmonies were swelling through the great cavern of the orchards, and nymphs and fauns dancing under the fragrant blossoming trees—and the world again forgotten by Narodny.

Madness of the Dust

by R. F. Starzl

Men who are isolated in lonely places can and do crack up. At least, for them, the radio remains some sort of communication with their home bases. But what of the man isolated in some mining or expeditionary base on some other more desolate world? Where the radio would be either impossible or wholly uncertain, where humanity was not a matter of a few days trek across mountains or plains? R. F. Starzl, who enjoyed great popularity in the early days of science fiction, is brought back to modern print with this unusual episode of Mars.

JOHN FARRINGTON looked out of a metal ringed, thick glass window at a hopeless red landscape, unrelieved by mountain or lake or tree. No sign of water, because the nearest of the great twenty mile wide but shallow canals was over a hundred miles away. No sight of blue sky, but a vague reddish void that on rare days darkened to a purplish black, where sometimes the brightest of the stars could be seen hours before the setting of the small but fiercely brilliant sun.

The sun was not fiercely brilliant now. High overhead it rode, but it was only a blob of red in a red sky, and ever higher whirled the clouds of red dust, driven by the fierce autumn winds of Mars. Endless tall, whirling columns of dust walked across the desert's face. Broad, viciously driven lines of dust swept over the horizon and hurled themselves upon the lonely trading post, as if they would demolish it and scatter the aluminum sections far and wide, but the shock of the wind's onslaught was light. Lacking the weight of a dense atmosphere, the Martian storm, for all of its violence, was feeble compared to terrestrial standards. It failed to halt the labors of the natives, who continued to pile bags of borium, a powerful catalytic agent then much in demand on Earth, on the loading platform as fast as it was received from the underground refineries, which extracted the borium direct from the ore body. Grotesquely magnified by the light and shadow distortion of the haze, they plodded stolidly about their tasks in the gathering murk. Occasionally one of them came close enough to the window for Farrington to see the dust on fat, blubbery scales covering arms, legs and back.

There was an apologetic drumming noise in the room behind the trader. It was Nasa. She stood uncertainly beside the double door through which

she had let herself in—herself and a blast of cold. A dry cold—almost the cold of waterless space.

"What is it, Nasa?" the man asked sharply.

She looked at him with the saucer of her great, single eye from which the dust protective lids were settling away in transparent folds. In a few moments the drumlike membrane of her chest inflated, and from it came sounds—sounds that had startled the terrestrial discoverer, a Miss Columbine, back in 1992. To Farrington the sounds conveyed meaning. Nasa was speaking in the bastard dialect used by the laboring classes of Mars.

"Get your ugly face out of here!" he shouted. "I'll call you when I want you to clean up."

She turned placidly to go, gentle, uncomplaining slave that she was. Farrington was stricken with quick compunction. He called her back and handed her an orange—that strange and luscious fruit, which, above all other importations from the succulent Earth, the Martians craved. Nasa pounced upon the gift, tossed it into her huge, purple-splotched maw, and with many gurgles and snorts of delight she savored its lush sweetness, let the juices trickle slowly and deliciously down her gullet, the while she boomed and purred from her drum head diaphragm.

"I don't know what's getting into me," Farrington thought. "I'm getting crankier every day. It's lucky those fellows are so good natured. When I heaved a rock at old Nua yesterday, he just let it bounce off and snored. He could have broken me in two with those steam shovel claws of his."

He put his hands to his temples. "Wonder what's the matter anyway. My head feels like I had a hoop of steel around it. I can't eat; I can't sleep. My eyes feel like they're burning."

He drew a large glass of water from the tank in the corner of the room and gulped it down. He refilled the glass and drank again. Although he filled himself to repletion, he could not slake the thirst that constantly consumed him. Suddenly he dropped the glass and it broke on the stone floor—the second that day. Dizzily he lurched to his cot. He tossed about on it, but soon he dropped off to sleep. When he awoke it was almost night. The wind was gone and stars were brilliant in the purplish black heavens. The Martian laborers had left—gone to their mysterious sub-martian caves, where they lived their half-reptilian lives.

"Don't know what I'm going to do if those spells keep up," said the trader to himself soberly. "Maybe I'd better ask for relief."

The thought galled him. He remembered the eagerness with which he had asked for this post—the most dangerous of all the colonizing points in the far flung solar system. It had been quickly discovered that the atmosphere of Mars was insidiously hostile to terrestrial life. In the early days many a colonist had been returned, writhing in the throes of a strange madness—a madness in which they babbled of 'The Dust—The Dust. A madness in which they sought to harm those dear to them.

Farrington had only laughed when Ellsmore, Old Ellsmore, head of the Planetary Civil Service, warned him of dangers at the Bortum post.

"It's got some mighty good men, and not all of them recovered," Old

Ellsmore said seriously. "Of course the salary is high on the Martian job, but when you consider the hazards it's not so much. They have to pay a high salary to get a white man to take the job at all. Why not let me fix you out with a nice post on Venus? The City of the Caverns is becoming quite a health resort, and you meet no end of smart people there."

"No," the young engineer said positively. "I don't care to loll around with a lot of professional travelers on a steam heated planet. Venus is too hot for a white man to get ahead on. Besides, you know how every pimply-faced clerk on Earth wants to be sent to Venus, and the salaries are accordingly. I couldn't marry Alfreda on the salary they pay."

"Don't worry about that, my dear Jack," smiled Ellsmore. "You know that the man who marries my daughter never has to worry about money. I'll —"

"Well, if I do, I *will*!" Farrington interrupted. "Unless I can make a stake I won't feel right about marrying anybody. I want the Borium post. I know I'll be able to fill my quota, and with the bonus it'll bring me, I'll be able to offer Alfreda a safe future."

"I admire your spirit," said Ellsmore sadly. "I hope you hold out long enough to get back safe. Well, go ahead and get ready to start."

Farrington smiled wearily at the quixotic spirit of his youth. His youth! Why, that was only six months ago, Earth time. Just six months, and he was still young. Only twenty five, but it seemed more. Well, he'd give something to be on that Turkish bath of a Venus right now, or better yet at a certain bend of a sandy creek back home in Texas.

It occurred to him that in six months his schedule called for completion of his quota. He pressed one of a row of buttons on his working desk. Hardly a minute later a trapdoor opened, and one of the Martian checkers climbed up. He was a youngster himself, and patently uneasy.

"Weight. Weight slips—got 'em?" Farrington addressed him eagerly.

The diaphragm tensed, snored placatively. Quickly the creature produced the receipts printed by automatic weighing machines, giving the total for each day. The machines were specially designed to give Earth weights on Mars.

With a joyful thrill Farrington read the figures—127 tons. His quota was only 120 tons. On the instant his mood changed. He felt again the pressure on his temples, the burning in his eyes. He saw the interior of the room through a red haze—red dust.

"Why didn't you tell me?" he roared. He leaped upon the astonished Martian, beat the unresisting creature harmlessly upon its leathery, blubber-filled scales. The protesting, wheedling noises from the diaphragm only increased his rage. He pounded the vocal apparatus of the Martian with his fists until the room was filled as by the low booming of thunder. And then of a sudden the room was alive with Martians. Anxiously, clumsily they picked up the frantic Terrestrial from his victim and carried the latter to bed. Conscious of their helpless concern, Farrington was filled with hate for them, looked sulkily at their ugly, kindly faces. He hated them for their ugliness, their low organization. He hated them for their rank, oily odor.

He hated also those aristocratic ruling Martians, lolling idly in their polished cities near the canals, living on the work and the brain of ancestors centuries ago dead, condescending to trade with the young, brash planet to sunward only for the sake of their palates. He hated their insolence in refusing direct contact with the Terrestrials, transacting all business through their slaves. He hated. . . .

He found that he hated everybody—himself, old Ellsmore, Alfreda even. No, he didn't hate her, but he hated. . . . God! For the strength to kill these beasts!

Water was pressed to his lips. He drank greedily, in long, deep draughts. When the glass was empty he mouthed for more. It was given to him. He lay exhausted. Gradually he drifted to sleep. The last sound he heard was the rustling whispers of his nurses. His last thought was.

"It's got me! It's got me! The Dust Madness has got me!"

When he awoke again it was still night, and the long, single room of the trading building was dimly lighted by the mellow glow of a single ion tube. The natives were all gone except Nasa who, mournfully regarding him, sat on the floor. His head was reasonably clear again, but he dared not move for fear of bringing on another fit of rage before he could do what had to be done. He caught Nasa's eye.

"Lift me—" he commanded guardedly, "lift me to radio!" He shut his eyes again. She lifted him, cot and all, set him down before the simple panel of the automatic transmitter. He reached for a central dial, turned it to the call of his operating base in Brazil. Overhead there was a subdued grinding as the astronomically corrected directional antenna turned to the proper position. A bell tinkled musically, a signal that the carrier wave was going out.

"Hello Rio! Hello! Hello Rio!" he said in ordinary conversational tones. He did not wait for a reply, knowing that minutes must pass before his message could reach the Earth, and minutes more before the answer, speeding at the rate of over 186,000 miles a second, could come back to him. So he gave the whole of his message at one time:

"This is John Farrington, Planetary Civil Service 4B1189, stationed at Borium post, Mars, reporting. We have completed our quota of 120 tons and are ready for relief. Include in next trade shipment 100 cases of cantaloupes and 40 barrels extracted honey. Protect shipment in forward holds better against interstellar cold—the loco, commissioner here is complaining. Please hurry relief. We have storms every day; the dust is bad. For God's sake hurry, before I go clear crazy!"

Almost instantly there came a reply from the resonant, slightly luminous globe above the panel:

"Buck up, Jack old boy! I'll be with you by daylight. I've been on the way a month, and I'll soon be dodging your dinky little moons. The old ball certainly is dusty; I couldn't see any of the canals or other markings for days on account of the dust."

"Is it you, Steve?" exclaimed the sick man. "By Glory! It is! Boy, Steve, I'm sure glad you're coming—you're sure the best friend I've got."

"Best friend, I hope, and most persistent rival. Fact is, old boy, I came here because Alfreda insisted. She was worried by some of your queer messages. She sent *me*, you understand, who have papers entitling me to command the finest Venerian liners, to take a rickety old hulk to this miserable hole and bring you home. That's what hopeless love will do to a man!"

Farrington put his hands to his temples. They were throbbing again. With quick, nervous movements he kicked the covers off him. With an enormous effort of will power he tried to keep his voice from shaking. He said levelly:

"Yes, I guess you're persistent all right. I guess you know when to take advantage of a man, when he's killing himself to make a home for a woman. I guess I can see you, those long months that I spent in this hell, hanging around her and turning her silly head with your sympathy—" The pressure in his temples was splitting his head—"When I'm able to get up again—I'll tear you—"

"DONG NG NG NG!"

It was the beginning of the Rio answering message.

"Reply to Borium post: Relief ship has already been sent and at last report was 200,000 miles from Mars. It should be in path of directional radio beam. Ship carries freshly made specific for Dust Madness. Freighter will stop on return from Uranus and load borium. Regarding complaint of frostbitten fruit, Captain Skoglund reported—"

The voice droned on, but Farrington did not hear. With superhuman strength he was struggling with Nasa, struggling to break away and vent his fury; to vent his fury on anything—the delicate instruments ranged around the room, for instance, in lieu of that still unreachable friend whom his madness pictured as a betrayer. He subsided finally amid sobs, accompanied by gulping noises of sympathy from Nasa as she plied him with water.

John Farrington sat in the half darkness of the old dispatch ship's white-painted hospital room. Through small ports of six inch thick glass he could catch a glimpse of the black sky with its great, steadily glowing stars. The faintly luminous wake of the atomic rockets, fastened at various points on the ship's hull, trailed past the window and off into infinity. Unquestionably the old space ship was making its best possible speed toward the Earth. Steve had mentioned that they were past the half way point and that soon the rocket tubes would be reversed. They were claring in a grand diagonal to a point of the Earth's orbit, mathematically determined, that would bring the ship to its base near the mouth of the Amazon river.

Farrington felt much better. He had only a vague recollection of having been carried, screaming and fighting, by some of the motley crew in Steve's command. The Martians could not be induced to even approach the ship. They had an overpowering dread of leaving their planet, ever since the disastrous expedition of the year 2025, when hundreds of them, having been induced to embark for Earth, died of tuberculosis in the humid, dense atmosphere so foreign to them.

The specific had again proved its worth. In conjunction with the constantly purified air of the ship it had allayed almost completely the dreadful

attacks of homicidal mania which was for many years to prove an almost insuperable barrier to the permanent colonization of Mars.

The door opened and Steve came in.

"How's the patient this morning?" he smiled cheerily. "You look a little peakish, but you're getting back some healthy color just the same."

"I feel fine, Steve. It doesn't seem possible now that I was so wild a couple of weeks ago. It seems like a dream."

"It was certainly a wild dream. I got a laugh out of your checker. You gave him such a beating on his diaphragm that he could hardly talk. He wasn't sore, though. You certainly put yourself in solid with the Martian work hogs before the dust madness got you."

"I hope you'll forget about the way I acted, Steve."

"It's all forgotten. It's all over, in fact. You've slept it off. I've used up all the specific, but I don't think you'll need any more. Just drink plenty of water; get the poison out of your system."

"It was awful while it lasted. You've saved my life in more ways than one, Steve. You've treated me as well as any doctor."

"It was that or nothing. They don't send out surgeons on these old tubs. If it wasn't that the underwriters insist upon it, they probably wouldn't even equip us with radio."

They discussed the niggardly policies of the ship owners at length and with considerable warmth. Steve talked of the destruction of a planetoid that had been a peril to shipping, and after they had taken a meal they repaired to one of the empty storage holds that was temporarily fitted up for a gymnasium.

"I'm not so good today," said Steve. "My side kind of hurts, but a good work out might help it."

They put on the gloves, and for ten minutes there was no talk; just the swift thudding of padded fists, the rapid shuffle of feet, and soon, the panting of breaths.

All at once Steve sat down, and his face was pale. He held his hand to his abdomen.

"Sorry! Sorry, old man! I didn't mean to foul you!" Farrington bent over his friend.

"You didn't foul me, Jack. You never touched me, but my belly sure is getting sensitive. It hurts like it was going to split open." His abdomen was in fact distended and the muscles were tense and hard.

"I guess it's the old appendicitis again," groaned Steve. "It's been bothering me, off and on, for years."

"Let me help you to the hospital cabin. You can sleep in my bed for a while."

"No -ouch! Not yet, anyway! Just let me sit here for a while. It'll get better soon."

But it didn't get better. A half hour later Farrington telephoned to the crew's quarters for help. Two Levantine roustabouts responded and carried the pale and perspiring shipmaster to the hospital. They were unprepossessing fellows, graduates of rough experiences on more than one remote planet.

"You'll have to take charge," Steve said feebly. "You needn't bother about navigation. Krassin and Boloman can handle the instruments all right, and they have their orders. But I guess you'll have to kind of watch me. I guess—I'm afraid—I'm going to—pass out. Alfie—Alfie, hold my hand!"

He was in a raging fever. His abdomen was still distended. His heart thudded terrifyingly.

Farrington rushed to the adjoining radio room. Dialing the Rio station, he demanded preference over all other messages. Without waiting for acknowledgment he recited the symptoms of the shipmaster's attack, closing with a desperate appeal for help. Quickly he unplugged the transmitting and receiving units, and by means of extension cords, set them up again by the bedside of the sick man.

"DONG NG-NG NG!"

"Rio station replying to Interplanetary L. 4. Dr. Camelard has been called from the infirmary and he already has a printed copy of your message. He will advise you what to do."

A few seconds later the doctor spoke:

"Most likely your patient is suffering from a ruptured appendix. You're lucky if he doesn't get general peritonitis. It's a hell of a note to send out a man with a chronic case like his on a ship full of bums and an invalid. Just the same you're going to save him if it possibly can be done.

"Look around and see if you can locate the standard surgical equipment chest. It'd better be there or some inspector is going to be in trouble. Open the wall cabinets until you find the steam sterilizer. Turn on the power, but don't forget to see that there's water in the boiler.

"While I'm talking to you you can wash your hands. For surgery your hands have to be not only washed, but *scrubbed*. Don't mind if you take off a little hide. Get them *clean*. Then you can rub 'em good with the bichloride of mercury. Fix it double strength. Open a tube of catgut, but don't take it out of the liquid until you need it."

The doctor paused to ascertain if Farrington was following him. In a few minutes he continued:

"Put one of the morphine tablets in his mouth now so he'll be ready when you are. Since you can't perform an operation without assistance, and keep your hands sterile, keep a bowl of chlormercoxol handy. Wash your hands in it every little while as you work.

"You won't need many instruments. Pick out a good sharp scalpel. Find one with a 45 degree blade. Take a couple of forceps and one or two good heavy retractors. You may not need a hemostat, because you're not going to take that man's appendix out. The shape he's in I would hardly dare try that even here. All you've got to do is to make an incision and put in an inch drainage tube. Understand that, just put in a drainage tube to let out the pus, and if you don't get in a lot of dirt, he'll probably recover."

On and on came the matter-of-fact directions. The doctor took each point separately, painstakingly instructing. Occasionally he paused to give Farrington a chance to ask questions. He told him how to locate the right spot, cut away between the navel and a point on the right hip; told him to shave

the drum tight skin; to wash it with the chlormercoxol, most deadly of all germicides, which would even penetrate tissues to destroy lurking unfriendly organisms.

And all that time Steve lay in shallow but persistent anesthesia. And all that time he babbled of Alfie—Alfreda. He thought she was standing beside him—denying him—denying him the kiss that he yearned for more than all other kisses that were available to a handsome young master of Interplanetary Lovers. His hallucinations shifted to the Caribbean. In a hydroplane they were skimming the crests of the dancing waves. She was smiling at him —

"Alfie—Alfie—I love you!"

Beads of sweat stood on Farrington's forehead. He was physically tired. He felt a nausea usually associated with space sickness, though the decelerating effort of the atomic rockets provided a very acceptable substitute for the steadying pull of gravity. If he could only sleep a little! But there lay his friend, utterly helpless. But *was* he his friend? He looked at the partly unclothed form narrowly. Certainly a magnificent body. Certainly a handsome head. Wonder if Alfreda thought so? The pressure of his temples was back. Not so bad, though. He drank deeply, a couple of pints of water.

What was that! Not too far? "Be careful not to go too deeply," the etherborne voice was saying. "Remember, you have a man's life in your hands."

"First you cut through the skin and fat. It won't bleed much. Next you come to the fascia. It's a sort of white, thick skin covering the muscles. Cut through it and you see the muscle. You can split that and won't need to cut much. Just take the handle of a scalpel and separate the fibers. Then you're clear down to the peritoneum, and it's ticklish work for an amateur. You'll find a thin tough membrane investing the viscera. Go very easy in cutting through. A slip of your knife and you might puncture an intestine and your man's done for, with all of the pus and corruption in the cavity. This is the way to do it: You take a little fold of the peritoneum with your fine forceps——"

On and on, endlessly. The room was oppressively silent. That steady pressure on his temples! His eyes burned. Oh, how he longed to rest! "A slip of the knife and he's done for!" Farrington battled against the horrible thought that dogged him. "Just a little slip of the knife" and Steve would stop meaning, "Alfie. Alfie, hold me!"

Forward, in their own quarters, were men. Stupid and brutal, to be sure, except for two busy navigators, but men. Farrington toyed with the thought of bringing one of them up, not to perform the operation, but to watch him. Farrington. He laughed. How could they know? How could anyone know? Just a little slip of the knife; just a little slip, and those restless tossings would soon be stilled. Besides, it wouldn't do to let the men know the seriousness of the situation. Mutiny under such conditions was not impossible. The sweeping voids of space still offered rich possibilities to pirates who were hearty and bold.

"I can't do it! I can't do it!" Farrington cried aloud. "Just one little slip and I'll kill him!"

"... having removed the most of the pus," went on the voice, unperturbed, "notice the color of the intestines. If they are red, inflamed, as if they had been scalded; if the veins are congested, we may safely assume—"

There came a shriek. Farrington's despairing cry had gone over seventy-six million miles of space, and had been heard by one who sat in Rio transmitting station in distracted silence. Her involuntary scream had been picked up and hurled back at the speed of light, and now echoed around the dingy cabin.

"Jack!" she sobbed. "Jack, you must! He saved your life, Jack. He saved your life for love of me. Don't fail me, Jack!"

"Take her out!" It was the voice of Dr. Camelard to an assistant.

"Of course you're going to make a success of this, Farrington," he resumed testily. "If you fail, Alfreda will never speak to you again. She has sat here in torture for a long, weary hour. Take hold of yourself, Farrington!"

"Alfie! Alfie!" gasped the sick man.

"... the idea is to insert the tube so that it will permit free drainage—I would give him another morphine tablet now, Farrington—free drainage will permit nature to take care of the trouble. The ruptured appendix may heal, or at any rate he will be tided over until we can operate on him at the hospital here with the high frequency apparatus, which will be perfectly safe. The thing to do is to keep him alive until then. See that the tube is well in past the peritoneum, and that it isn't obstructed. You sew the flap up as far as possible and put a stitch through the tube to hold it in place.

"Now, then, we're ready to start!"

Farrington seized a scalpel. The iron band around his head was intolerably tight. His eyes burned. He saw the form before him, sometimes in gray light, sometimes in red haze—Red Dust. Hammers were clanging on iron in his brain. Two voices disputed between hammer-blows.

"No one will ever know," urged one. "A little slip, down in that pus and corruption—a little slip!" The voice was thinly eager. It was demoniacal; it was yearning. It hammered on his brain like a sledge on iron, with a bloodthirsty red eagerness—with a dry, cold eagerness. "Just a little slip—just a tiny little slip!"

"He is your friend!" insisted the other voice. It was a warm voice, and very, very weary. "He saved your life. He was sick, but he came to get you in this old tub because there was nobody else available. He could be comfortable and safe if he'd stayed home, but he came even before you asked for help, because he thought you might die if he didn't."

"Your friend!" mocked the sneering red voice. "While you were slaving in that hell hole for the sake of a woman, he was winning her from you. Your friend! Fool! Don't you know he came because of her, not you?"

"If she loves him," insisted the other voice, still patient, wearier still, "there are plenty of other women. And if you love her, why kill him? After all, he saved you, no matter what his motives. And if you love her, save him for her!"

"The first incision," came the message, "should be practically vertical. Hold the skin firmly between two fingers, stretching it if not already tight——"

Farrington began.

The L-4 settled smoothly in the mooring pit at Rio. A dirty looking mechanic in fatigue uniform unscrewed the bolts holding the door tight to the tall, cylindrical sides. Through the thick glass his head could be seen bobbing up and down as he wound at the heavy screws. With a rasping of corroded hinges the vacuum door swung open. A collapsible gangway slid automatically to the edge of the pit.

The little group at the pit peered anxiously into the semi-darkness of the interior. An elevator descended clicking. Farrington came to the door. He was deathly pale. He walked slackly. He stood aside and motioned with his hand.

Four hospital orderlies quickly entered the ship. They stepped into the elevator with Farrington. There was a long wait. More mechanics came out, squirming over the pitted surfaces of the ship by means of handholds placed at convenient intervals. They connected lines of air hose to the tank leads, coupled water pipes, replenished the atomic cartridges, replaced the badly worn nozzles of the rockets with new ones of artificially crystallized carbon. Boxes and barrels of air conditioning chemicals were trucked into the ship. Tons of vitiated chemicals cascaded through vents into the reworking hoppers below. It was a scene of cheerful busile and activity, such as occurred daily at numerous space-ports everywhere on the inhabitable planets of the solar system, but to the little group on the platform it was a scene of dread. They saw that dark door of uncertainty. They awaited the clicking of the elevator.

It came. Almost instantly the four orderlies were in the door. They carried a stretcher. On it was Steve. He was grinning jovially and waved gaily to his friends. A girl detached herself from the group. She rushed to the side of the stretcher. She gave Steve a quick hug and a kiss, and then she was inside the ship. She had to climb a dirty metal ladder and thread her way through a maze of pipes and tanks before she finally found Farrington. He was gazing sadly out of a port at a waving sea of tropical trees.

"Jack!" she said.

"Oh, hello, Alfreda!"

"Aren't you glad to see me?"

"Oh, sure, you bet!"

"I've something to tell you, Jack."

"I know it already," he said gently. "I hope you and Steve are very happy."

"We're all happy," she said, uncomprehending, "and so relieved! When your radio went dead we didn't know what happened. We could only guess, and worry." She was laughing in glad release from the tension.

"I guess I had to mess up something," he explained. "I had a relapse of that dust thing and was half crazy. I tore that transmitter to bits, after

I'd finished and got Steve to bed. I can't just remember what happened. It was a nightmare!"

"Poor, dear Jack!" she murmured softly. "Aren't you going to kiss me?"

"Why, why—I thought——"

"No more Martian trips for you!" she chattered gaily. "The Board of Directors has voted to appoint you manager of the planetary port at Gibraltar. I'll love it there, and Jack, I'm so glad to think that our children will not have to be born and raised on foreign soil. I'm old fashioned that way. I'd never feel really at home except on the good old Earth."

The Cosmic Express

by Jack Williamson

How easy it all sounds when we see it on radio or television! Buck Rogers and company clean and slick, rocketing over the Solar System, blasting away at sneering villains, cleaning up conspiracies, and generally never missing a meal or losing that well kept appearance. Jack Williamson in this little satiric tale takes his own profession for a ride—the profession of science fiction writer. The hero of this tale is an author of interplanetary adventure sagas. It certainly shows a keen personal appreciation of humor for such an author to spoof himself as neatly as Jack Williamson does here.

MR. ERIC STOKES HARDING tumbled out of the crumpled bed clothing, a striking slender figure in purple-striped pajamas. He smiled fondly across to the other of the twin beds, where Nada, his pretty bride, lay quiet beneath light silk covers. With a groan, he stood up and began a series of fantastic bending exercises. But after a few half hearted movements, he gave it up, and walked through an open door into a small bright room, its walls covered with book cases and also with scientific appliances that would have been strange to the man of four or five centuries before, when the Age of Aviation was but beginning.

Yawning, Mr. Eric Stokes Harding stood before the great open window, staring out. Below him was a wide, park-like space, green with emerald lawns, and bright with flowering plants. Two hundred yards across it rose an immense pyramidal building—an artistic structure, gleaming with white marble and bright metal, striped with the verdure of terraced roof-gardens, its slender peak rising to help support the gray, steel-ribbed glass roof above. Beyond, the park stretched away in illimitable vistas, broken with the graceful columned buildings that held up the great glass roof.

Above the glass, over this New York of 2432 A. D., a freezing blizzard was sweeping. But small concern was that to the lightly clad man at the window, who was inhaling deeply the fragrant air from the plants below—air kept, winter and summer, exactly at 20° C.

With another yawn, Mr. Eric Stokes Harding turned back to the room, which was bright with the rich golden light that poured in from the suspended globes of the cold atmosphere that illuminated the snow-covered

city. With a distasteful grimace, he seated himself before a broad, paper-littered desk, sat a few minutes leaning back, with his hands clasped behind his head. At last he straightened reluctantly, slid a small typewriter out of its drawer, and began pecking at it impatiently.

For Mr. Eric Stokes-Harding was an author. There was a whole shelf of his books on the wall, in bright jackets, red and blue and green, that brought a thrill of pleasure to the young novelist's heart when he looked up from his clattering machine.

He wrote "thrilling action romances," as his enthusiastic publishers and television directors said, "of ages past, when men were men. Red-blooded heroes responding vigorously to the stirring passions of primordial life!"

He was impartial as to the source of his thrills: provided they were distant enough from modern civilization. His hero was likely to be an ape-man roaring through the jungle, with a bloody rock in one hand and a beautiful girl in the other. Or a cowboy, "hard riding, hard shooting," the vanishing hero of the ancient ranches. Or a man marooned with a lovely woman on a desert South Sea island. His heroes were invariably strong, fearless, resourceful fellows, who could handle a club on equal terms with a cave man, or call science to aid them in defending a beautiful mate from the terrors of a desolate wilderness.

And a hundred million read Eric's novels, and watched the dramatization of them on the television screens. They thrilled at the simple, romantic lives his heroes led, paid him handsome royalties, and subconsciously shared his opinion that civilization had taken all the best from the life of man.

Eric had settled down to the artistic satisfaction of describing the sensuous delight of his hero in the roasted marrow bones of a dead mammoth, when the pretty woman in the other room stirred, and presently came tripping into the study, gay and vivacious, and—as her husband of a few months most justly thought—altogether beautiful in a bright silk dressing gown.

Recklessly, he slammed the machine back into its place, and resolved to forget that his next "red-blooded action thriller" was due in the publisher's office at the end of the month. He sprang up to kiss his wife, held her embraced for a long happy moment. And then they went hand in hand, to the side of the room and punched a series of buttons on a panel—a simple way of ordering breakfast sent up the automatic shaft from the kitchens below.

Nada Stokes-Harding was also an author. She wrote poems "back to nature stuff"—simple lyrics of the sea, of sunsets, of bird songs, of bright flowers and warm winds, of thrilling communion with Nature, and growing things. Men read her poems and called her a genius. Even though the whole world had grown up into a city, the birds were extinct, there were no wild flowers, and no one had time to bother about sunsets.

"Eric, darling," she said, "isn't it terrible to be cooped up here in this little flat, away from the things we both love?"

"Yes, dear. Civilization has ruined the world. If we could only have lived a thousand years ago, when life was simple and natural, when men

hunted and killed their meat, instead of drinking synthetic stuff, when men still had the joys of conflict, instead of living under glass, like hot house flowers."

"If we could only go somewhere——"

"There isn't anywhere to go. I write about the West, Africa, South Sea islands. But they were all filled up two hundred years ago. Pleasure resorts, sanatoriums, cities, factories."

"If we only lived on Venus! I was listening to a lecture on the television, last night. The speaker said that the Planet Venus is younger than the Earth, that it has not cooled so much. It has a thick cloudy atmosphere, and low, rainy forests. There's simple, elemental life there—like Earth had before civilization ruined it."

"Yes, Kingsley, with his new infra-red ray telescope, that penetrates the cloud layers of the planet, proved that Venus rotates in about the same period as Earth; and it must be much like Earth was a million years ago."

"Eric, I wonder if we could go there! It would be so thrilling to begin life like the characters in your stories, to get away from this hateful civilization, and live natural lives. Maybe a rocket——"

The young author's eyes were glowing. He skipped across the floor, seized Nada, kissed her ecstatically. "Splendid! Think of hunting in the virgin forest, and bringing the game home to you! But I'm afraid there is no way. —Wait! The Cosmic Express!"

"The Cosmic Express?"

"A new invention just perfected a few weeks ago, I understand. By Ludwig Von der Valls, the German physicist."

"I've quit bothering about science. It has ruined nature, filled the world with silly, artificial people, doing silly, artificial things."

"But this is quite remarkable, dear. A new way to travel—by ether!"

"By ether!"

"Yes. You know of course that energy and matter are interchangeable terms; both are simply etheric vibration, of different sorts."

"Of course. That's elementary." She smiled proudly. "I can give you examples, even of the change. This disintegration of the radium atom, making helium and lead and *energy*. And Millikan's old proof that his Cosmic Ray is generated when particles of electricity are united to form an atom."

"Fine! I thought you said you weren't a scientist." He glowed with pride. "But the method, in the new Cosmic Express is simply to convert the matter to be carried into power, send it out as a radiant beam and focus the beam to convert it back into atoms at the destination."

"But the amount of energy must be terrific——"

"It is. You know the short waves carry more energy than long ones. The Express Ray is an electromagnetic vibration of frequency far higher than that of even the Cosmic ray, and correspondingly more powerful and more penetrating."

The girl frowned, running slim fingers through golden-brown hair.

"But I don't see how they get any recognizable object, not even how they get the radiation turned back into matter."

"The beam is focused, just like the light that passes through a camera lens. The photographic lens, using light rays, picks up a picture and reproduces it again on the plate—just the same as the Express Ray picks up an object and sets it down on the other side of the world."

"An analogy from television might help. You know that by means of the scanning disc, the picture is transformed into mere rapid fluctuations in the brightness of a beam of light. In a parallel manner, the focal plane of the Express Ray moves slowly through the object, progressively, dissolving layers of the thickness of a single atom, which are accurately reproduced at the other focus of the instrument—which might be in Venus!"

"But the analogy of the lens is the better of the two. For no receiving instrument is required, as in television. The object is built up of an infinite series of plane layers, at the focus of the ray, no matter where that may be. Such a thing would be impossible with radio apparatus, because even with the best beam transmission, all but a tiny fraction of the power is lost, and power is required to rebuild the atoms. Do you understand, dear?"

"Not altogether. But I should worry! Here comes breakfast. Let me butter your toast."

A bell had rung at the shaft. She ran to it, and returned with a great silver tray, laden with dainty dishes, which she set on a little side table. They sat down opposite each other, and ate, getting as much satisfaction from contemplation of each other's faces as from the excellent food. When they had finished, she carried the tray to the shaft, slid it in a slot, and touched a button—thus disposing of the culinary cares of the morning.

She ran back to Eric, who was once more staring distastefully at his typewriter.

"Oh, darling! I'm thrilled to death about the Cosmic Express! If we could go to Venus, to a new life on a new world, and get away from all this hateful conventional society——"

"We can go to their office—it's only five minutes. The chap that operates the machine for the company is a pal of mine. He's not supposed to take passengers except between the offices they have scattered about the world. But I know his weak point——"

Eric laughed, fumbled with a hidden spring under his desk. A small polished object, gleaming silvery, slid down into his hand.

"Old friendship, *plus* this, would make him—like spinach."

Five minutes later Mr. Eric Stokes-Harding and his pretty wife were in street clothes, light silk tunics of loose, flowing lines—little clothing being required in the artificially warmed city. They entered an elevator and dropped thirty stories to the ground floor of the great building.

There they entered a cylindrical car, with rows of seats down the sides. Not greatly different from an ancient subway car, except that it was air-tight, and was hurled by magnetic attraction and repulsion through a

tube exhausted of air, at a speed that would have made an old subway rider gasp with amazement.

In five more minutes their car had whipped up to the base of another building, in the business section, where there was no room for parks between the mighty structures that held the unbroken glass roofs two hundred stories above the concrete pavement.

An elevator brought them up a hundred and fifty stories. Eric led Nada down a long, carpeted corridor to a wide glass door, which bore the words:
COSMIC EXPRESS

stenciled in gold capitals across it.

As they approached, a lean man, carrying a black bag, darted out of an elevator shaft opposite the door, ran across the corridor, and entered. They pushed in after him.

They were in a little room, cut in two by a high brass grill. In front of it was a long bench against the wall, that reminded one of the waiting room in an old railroad depot. In the grill was a little window, with a lazy, brown-eyed youth leaning on the shelf behind it. Beyond him was a great, glittering piece of mechanism, half hidden by the brass. A little door gave access to the machine from the space before the grill.

The thin man in black, whom Eric now recognized as a prominent French heart-specialist, was dancing before the window, waving his bag frantically, raving at the sleepy boy.

"Queek! I have tell you zee truth! I have zee most urgent necessity to go quickly. A patient I have in Páree, zat ees in zee most criteical condition!"

"Hold your horses just a minute, Mister. We got a client in the machine now. Russian diplomat from Moscow to Rio de Janeiro. . . . Two hundred seventy dollars and eight cents, please. . . . Your turn next. Keep cool, you'll be there before you know it. Remember this is just an experimental service. Regular installations all over the world in a year. . . . Ready now. Come on in."

The youth took the money, pressed a button. The door sprang open in the grill, and the frantic physician leaped through it.

"Lie down on the crystal, face up," the young man ordered. "Hands at your sides, don't breathe. Ready!"

He manipulated his dials and switches and pressed another button.

"Why, hello, Eric, old man!" he cried. "That's the lady you were telling me about? Cor, congratulations!" A bell jangled before him on the panel. "Just a minute. I've got a call."

He punched the board again. Little bulbs lit and glowed for a second. The youth turned toward the half-hidden machine, spoke courteously.

"All right, madam. Walk out. Hope you found the transit pleasant."

"But my Violet! My precious Violet!" a shrill female voice came from the machine. "Sir, what have you done with my darling Violet?"

"I'm sure I don't know, madam. You lost it off your hat?"

"None of your impertinence, sir! I want my dog."

"Ah, a dog. Must have jumped off the crystal. You can have him sent on for three hundred and——"

"Young man, if any harm comes to my Violet—I'll—I'll—I'll appeal to the Society for the Prevention of Cruelty to Animals!"

"Very good, madam. We appreciate your patronage."

The door flew open again. A very fat woman, puffing angrily, face highly colored, clothing shimmering with artificial gems, waddled pompously out of the door through which the frantic French doctor had so recently vanished. She rolled heavily across the room, and out into the corridor. Shriill words floated back:

"I'm going to see my lawyer! My precious Violet—"

The sallow youth winked "And now what can I do for you, Eric?"

"We want to go to Venus, if that ray of yours can put us there."

"To Venus? Impossible. My orders are to use the Express merely between the sixteen designated stations, at New York, San Francisco, Tokio, London—"

"See here, Charley," with a cautious glance toward the door, Eric held up the silver flask. "For old time's sake, and for this——"

The boy seemed dazed at sight of the bright flask. Then, with a single swift motion, he snatched it out of Eric's hand, and bent to conceal it below his instrument panel.

"Sure, old boy. I'd send you to heaven for that, if you'd give me the micrometer readings to set the ray with. But I tell you, this is dangerous. I've got a sort of television attachment, for focusing the ray. I can turn that on Venus—I've been amusing myself, watching the life there, already. Terrible place. Savage. I can pick a place on high land to set you down. But I can't be responsible for what happens afterward."

"Simple, primitive life is what we're looking for. And now what do I owe you ——"

"Oh, that's all right. Between friends. Provided that stuff's genuine! Walk in and lie down on the crystal block. I'll stand at your sides. Don't move."

The little door had swung open again, and Eric led Nada through. They stepped into a little cell, completely surrounded with mirrors and vast prisms and lenses and electron tubes. In the center was a slab of transparent crystal, eight feet square and two inches thick, with an intricate mass of machinery below it.

Eric helped Nada to a place on the crystal, lay down at her side.

"I think the Express Ray is focused just at the surface of the crystal, from below," he said "It dissolves our substance, to be transmitted by the beam. It would look as if we were melting into the crystal."

"Ready," called the youth. "Think I've got it for you. Sort of a high island in the jungle. Nothing bad in sight now. But, I say—how're you coming back? I haven't got time to watch you."

"Go ahead. We aren't coming back."

"Gee! What is it? Elopement? I thought you were married already. Or is it business difficulties? The Bears did make an awful raid last night. But you better let me set you down in Hong Kong."

A bell jangled. "So long," the youth called.

Nada and Eric felt themselves enveloped in fire. Sheets of white flame seemed to lap up about them from the crystal block. Suddenly there was a

sharp tingling sensation where they touched the polished surface. Then blackness, blankness.

The next thing they knew, the fires were gone from about them. They were lying in something extremely soft and fluid; and warm rain was beating in their faces. Eric sat up, found himself in a mud puddle. Beside him was Nada, opening her eyes and struggling up, her bright garments stained with black mud.

All about rose a thick jungle, dark and gloomy and very wet. Palm-like, the gigantic trees were, or fern-like, flinging clouds of leathery green foliage high against a somber sky of unbroken gloom.

They stood up, triumphant.

"At last!" Nada cried. "We're free! Free of that hateful old civilization! We're back to Nature!"

"Yes, we're on our feet now, not parasites on the machines."

"It's wonderful to have a fine, strong man like you to trust in, Eric. You're just like one of the heroes in your books!"

"You're the perfect companion, Nada. . . . But now we must be practical. We must build a fire, find weapons, set up a shelter of some kind. I guess it will be night, pretty soon. And Charley said something about savage animals he had seen in the television."

"We'll find a nice dry cave, and have a fire in front of the door. And skins of animals to sleep on. And pottery vessels to cook in. And you will find seeds and grow grain."

"But first we must find a flint bed. We need flint for tools, and to strike sparks to make a fire with. We will probably come across a chunk of virgin copper, too—it's found native."

Presently they set off through the jungle. The mud seemed to be very abundant, and of a most sticky consistence. They sank into it ankle deep at every step, and vast masses of it clung to their feet. A mile they struggled on, without finding where a provident nature had left them even a single fragment of quartz, to say nothing of a mass of pure copper.

"A darned shame," Eric grumbled, "to come forty million miles, and meet such a reception as this!"

Nada stopped. "Eric," she said, "I'm tired. And I don't believe there's any rock here, anyway. You'll have to use wooden tools, sharpened in the fire."

"Probably you're right. This soil seemed to be of alluvial origin. Shouldn't be surprised if the native rock is some hundreds of feet underground. Your idea is better."

"You can make a fire by rubbing sticks together, can't you?"

"It can be done easily enough, I'm sure. I've never tried it, myself. We need some dry sticks, first."

They resumed the weary march, with a good fraction of the new planet adhering to their feet. Rain was still falling from the dark heavens in a steady, warm downpour. Dry wood seemed scarce as the proverbial hen's teeth.

"You didn't bring any matches, dear?"

"Matches! Of course not! We're going back to Nature."

"I hope we get a fire pretty soon."

"If dry wood were gold dust, we couldn't buy a hot dog."

"Eric, that reminds me that I'm hungry."

He confessed to a few pangs of his own. They turned their attention to looking for banana trees, and coconut palms, but they did not seem to abound in the Venerian jungle. Even small animals that might have been slain with a broken branch had contrary ideas about the matter.

At last, from sheer weariness, they stopped, and gathered branches to make a sloping shelter by a vast fallen tree-trunk.

"This will keep out the rain —maybe—" Eric said hopefully. "And tomorrow, when it has quit raining—I'm sure we'll do better."

They crept in, as gloomy night fell without. They lay in each other's arms, the body warmth oddly comforting. Nada cried a little.

"Buck up," Eric advised her. "We're back to nature—where we've always wanted to be."

With the darkness, the temperature fell somewhat, and a high wind rose, whipping cold rain into the little shelter, and threatening to demolish it. Swarms of mosquito-like insects, seemingly not inconvenienced in the least by the inclement elements, swarmed about them in clouds.

Then came a sound from the dismal stormy night, a hoarse, bellowing roar, raucous, terrifying.

Nada clung against Eric. "What is it, dear?" she chattered.

"Must be a reptile. Dinosaur, or something of the sort. This world seems to be in about the same state as the earth when they flourished there. . . . But maybe it won't find us."

The roar was repeated, nearer. The earth trembled beneath a mighty tread.

"Eric," a thin voice trembled. "Don't you think—it might have been better— You know the old life was not so bad, after all."

"I was just thinking of our rooms, nice and warm and bright, with hot foods coming up the shaft whenever we pushed the button, and the gay crowds in the park, and my old typewriter."

"Eric?"

"Yes, dear."

"Don't you wish—we had known better?"

"I do." If he winced at the "we" the girl did not notice.

The roaring outside was closer. And suddenly it was answered by another raucous bellow, at considerable distance, that echoed strangely through the forest. The fearful sounds were repeated, alternately. And always the more distant seemed nearer, until the two sounds were together.

And then an infernal din broke out in the darkness. Bellows. Screams. Deafening shrieks. Mighty splashes, as if struggling Titans had upset oceans. Thunderous crashes, as if they were demolishing forests.

Eric and Nada clung to each other, in doubt whether to stay or to fly through the storm. Gradually the sound of the conflict came nearer, until the earth shook beneath them, and they were afraid to move.

Suddenly the great fallen tree against which they had erected the flimsy

shelter was rolled back, evidently by a chance blow from the invisible monsters. The pitiful roof collapsed on the bedraggled humans. Nada burst into tears.

"Oh, if only—if only——"

Suddenly flame lapped up about them, the same white fire they had seen as they lay on the crystal block. Dizziness, insensibility overcame them. A few moments later, they were lying on the transparent table in the Cosmic Express office, with all those great mirrors and prisms and lenses about them.

A hustling, red-faced official appeared through the door in the grill, fairly bubbling apologies.

"So sorry—an accident—inconceivable. I can't see how he got it! We got you back as soon as we could find a focus. I sincerely hope you haven't been injured."

"Why—what—what——"

"Why I happened in, found our operator drunk. I've no idea where he got the stuff. He muttered something about Venus. I consulted the auto-register, and found two more passengers registered here than had been recorded at our other stations. I looked up the duplicate beam coordinates, and found that it had been set on Venus. I got men on the television at once, and we happened to find you."

"I can't imagine how it happened. I've had the fellow locked up, and the 'dry-laws' are on the job. I hope you won't hold us for excessive damages."

"No, I ask nothing except that you don't press charges against the boy. I don't want him to suffer for it in any way. My wife and I will be perfectly satisfied to get back to our apartment."

"I don't wonder. You look like you've been through—I don't know what. But I'll have you there in five minutes. My private car——"

* * * * *

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